# THE EFFECTIVENESS OF COMMUNICATION AS A MEDIATING VARIABLE IN IMPROVING THE PERFORMANCE OF LAYER CHICKEN FARMING

**Anak Agung Istri Agung Peradnya Dewi[*], I Dewa Putu Oka Suardi, and Gede Mekse Korri Arisena**

Agribusiness, Faculty of Agriculture, Udayana University, Denpasar, Bali, Indonesia

*Correspondence Email: agungperadnyadewi@gmail.com

## ABSTRACT

Optimizing chickens as an economic resource to provide maximum income for farmers and their families requires farmers with entrepreneurial competence. To improve the performance of chicken farming businesses, in addition to entrepreneurial competence, farm owners also need enhanced communication skills to navigate the internal and external business environment. This study aims to examine the internal and external environment, entrepreneurial competence, communication, and performance of chicken farm owners in Tabanan Regency and test the effectiveness of communication as a mediating variable between the internal environment, external environment, and entrepreneurial competence on the performance of layer chicken farming businesses in Tabanan Regency. The study was conducted in three villages: Jatiluwih, Senganan, and Babahan in Penebel District, Tabanan Regency. The sample consisted of 30 out of 51 farmers with the criterion of keeping more than 6,000 chickens. The analysis method was divided based on research objectives: the first objective was analyzed using descriptive analysis with class interval calculations, and the second was analyzed using Generalized Structured Component Analysis (GSCA). The results showed that layer chicken farming businesses in Penebel District, Tabanan, exhibited good performance with effective organizational communication and entrepreneurial competence, despite facing internal, external, and research-development challenges. Furthermore, the communication model as a mediating variable is effective in layer chicken farming businesses, indicating that communication plays a crucial role in enhancing performance by effectively mediating changes in the external environment. Entrepreneurial competence and the internal environment also directly contribute to performance without requiring extensive communication.

**Keywords**: *business performance, communication, external, environment, entrepreneurial competency, internal*

## BACKGROUND

Chickens have become one of the most widely distributed poultry species globally, playing a dominant role as a source of animal protein. According to BRIN's research in 2023, chickens account for 71.35% of the total national meat production, making them a reliable asset for the national livestock industry, supporting the social, cultural, and economic life of communities (Nisa 2020; Mujyambere *et al.,* 2022). Optimizing chickens as a resource capable of producing economically valuable products and providing maximum income for farmers and their families requires farmers with entrepreneurial competence (Muatip 2008). This competence not only includes knowledge and insights about livestock farming but also management skills and positive behavior. According to

Spencer & Spencer (1993), this competence is essential for farmers to solve problems and demonstrates an individual's ability to behave, think, and action in a business situation.

Developing farmer behavior to optimize entrepreneurial competence requires both internal and external factors (Arfan, 2019; Agung *et al.*, 2022; Setiadi *et al.*, 2022). Entrepreneurial competence is widely recognized as a crucial factor in the success of agricultural businesses, including chicken farming. This competence encompasses a range of skills and attributes, such as problem-solving, innovation, risk-taking, and the ability to seize opportunities (Spencer & Spencer, 1993; Casson, 2010). However, these competencies are only effective when coupled with strong communication. Effective communication allows entrepreneurs to articulate ideas, coordinate efforts, and build partnerships, making it essential for translating entrepreneurial competence into tangible business success. In chicken farming, where collaboration with various stakeholders is vital, communication serves as the bridge that connects entrepreneurial abilities with practical outcomes, driving overall business performance. Thus, this study emphasizes the need for effective communication as a vital complement to entrepreneurial competence in achieving optimal business results. These two main factors can support the success of livestock businesses. Research by Muharastri (2013); Nursiah *et al.* (2015); Rahmi (2015), indicates that one of the factors influencing business performance is the entrepreneurial competence of the business actors. Similarly, studies by Casson (2010) and Maryam *et al.* (2022), show that farmers with an entrepreneurial spirit tend to have a positive and optimistic attitude toward their business, find creative solutions to problems, innovate, seize opportunities, and take calculated risks.

According to data from the Bali Provincial Agriculture and Food Security Office for 2021-2022, Tabanan Regency is one of the regencies in Bali with the largest potential for developing both layer and broiler chicken farming. Total poultry production in Tabanan Regency was 30,103 in 2021-2022. Tabanan Regency is the leading poultry producer in Bali Province, comprising 10 districts. Specifically, Penebel District within Tabanan Regency is known for its significant population engaged in both layer and broiler chicken farming, recognized by the local community of Tabanan and generally across Bali (Direktorat Statistik Peternakan Perikanan dan Kehutanan, 2022; Puspitawati *et al.*, 2015).

In 2022, the largest total population of chicken farm owners, totaling 187 individuals producing layer and broiler chickens, was located in Penebel District within Tabanan Regency. The high production of layer and broiler chicken meat is attributed to the growth of poultry farming in Indonesia. This growth is driven by rapid turnover of business capital and substantial market opportunities, attracting interest from the general public as well as investors to engage in chicken farming (Prastyo & Kartika, 2017). Given the poultry farming potential in Tabanan Regency, resilient entrepreneurs are needed to maintain the performance of chicken farming businesses, which will ultimately determine the development of agriculture in the future (Suardi *et al*., 2023; Suardi *et al*., 2022).

Entrepreneurs running their businesses require effective and proficient communication to develop their livestock operations. Recent research emphasizes that neglecting communication can lead to inefficiencies in establishing partnerships, resulting in the underutilization of human resources and negatively impacting business performance (Brink & Costigan, 2023). In the agricultural sector, clear communication is essential for coordination among stakeholders and effective interaction with external parties, ensuring that critical information is conveyed accurately, which ultimately supports

business success (Hefner, 2023). Therefore, further research is needed on the role of communication among farmers, which can potentially enhance livestock development in a region and improve the performance or productivity of chicken farming (Indraningsih, 2011; Wardyaningrum, 2012). Business performance is crucial to discuss because it directly impacts the existence and sustainability of the business in the future, aligning with its goals, vision, and mission, as well as the achievement of results necessary to realize these objectives (Dewi, 2022).

This research aims to fill the gap in studies regarding the effectiveness of communication in enhancing the performance of chicken farming businesses in Tabanan Regency, using Generalized Structured Component Analysis (GSCA). An effective communication model plays a crucial role in improving chicken farming in Bali Province by disseminating best practices, empowering farmers, fostering collaboration, and facilitating information exchange. Overall, this strengthens food security by increasing the production and accessibility of local chicken products. The novelty of this research lies in making communication a mediating variable between the internal environment, external environment, entrepreneurial competence, and the performance of chicken farming businesses in Tabanan Regency. This study is essential for enhancing business performance within a company. In addition to entrepreneurial competence, poultry farm owners require effective communication as a soft skill to navigate environmental factors both within and outside their businesses in Tabanan Regency.

## RESEARCH METHODS

This research was conducted in Penebel District, Tabanan Regency, Bali Province. Among the 18 villages in Penebel District, three villages were selected based on having the highest number of chicken farmers: Jatiluwih, Senganan, and Babahan. The selection of Jatiluwih, Senganan, and Babahan villages in Penebel District for this research was based on several specific reasons that underscore their relevance to the study. These three villages were chosen due to their significantly higher number of chicken farmers compared to other villages in the district. This higher concentration of chicken farmers makes these villages ideal for studying the dynamics of poultry farming, as they provide a larger and more active sample population, ensuring that the findings of the research are both relevant and representative of the area's poultry farming practices. The research observations took place on February 25, 2024. The research was divided into several stages: data collection in the field, data tabulation, data analysis, drafting discussions, preparing the manuscript for publication, culminating in the preparation of reports and outputs as the targets of this research. The population in this study consisted of 51 layer chicken farmers in the Penebel District, from which 30 farmers were selected based on the criterion of owning more than 6,000 chickens. Specifically, the population focused on chicken farmers in the three villages with the largest number of farmers in Penebel District: Jatiluwih, Senganan, and Babahan. According to the 2022 USPET data from Tabanan Regency, there were 30 farmers who met the criteria.

The selection of the research sample used a purposive sampling technique (Sugiono, 2010). The sample for this study consists of chicken farm owners in three selected villages in Penebel District who own more than 6,000 chickens. Specifically, out of the total population of 51 chicken farm owners, only 30 individuals met the criteria and were selected as samples for this research, based on the researcher's criterion of business scale for chicken farms with a minimum of 6,000 chickens.

According to Cohen *et al.* (2007); Maheswari & Dwiutami (2013); Sugiono (2010), the minimum sample size required for quantitative research is typically 30 samples.

In this research, there are five study variables measured with 58 indicators that will be converted into statements in a questionnaire required for the study. The measurement scale used in this research is the Likert scale. According to Siregar (2014), the likert scale is used for measuring attitudes, opinions, and perceptions of individuals toward a specific object or phenomenon. The Likert scale typically uses a 5-point scale for variables such as Communication (KO), Internal Environment (LI), External Environment (LE), Entrepreneurial Competence (KW), and Business Performance (KU). For more details, the research framework is available in Figure 1.
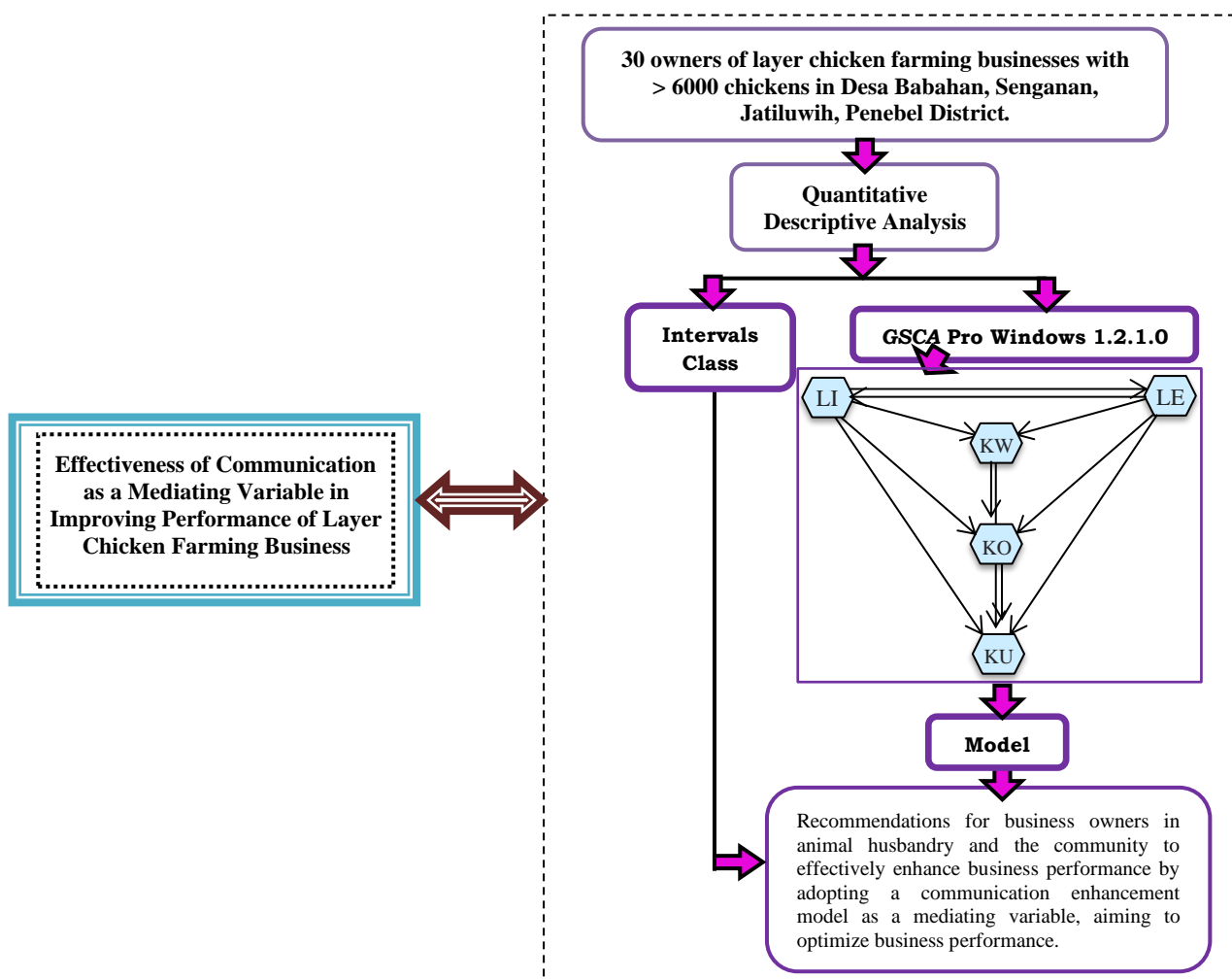


**Figure 1.** Conceptual Framework of Research: Effectiveness of Communication as a Mediating Variable in Improving Business Performance
Source: Primary Data (2024)

In this study, the first objective is analyzed using quantitative descriptive analysis with interval classes. This analysis aims to provide an overview of data collected through interview techniques aided by a questionnaire, which describes the conditions of the internal and external environment, entrepreneurial competence, communication, and business performance of owners of layer chicken farming businesses in Penebel District, Tabanan. The criteria for interpreting average scores in

questionnaire responses will be calculated using interval class width calculations (Safitri, 2024). The second objective of this study is to test the communication model as a mediating variable between the internal environment, external environment, entrepreneurial competence, and business performance of chicken farming in Tabanan Regency using GSCA (Generalized Structured Component Analysis). According to Damaryanti et al., (2022), GSCA is used for analyzing general structured components that represent a component-based approach for modeling structural equations. The data for analysis are sourced from interviews with chicken farm owners in Tabanan Regency, guided by a questionnaire using a 5-point Likert scale. The research data is inputted into Microsoft Excel, categorized as needed for analysis, and then inputted into GSCA Pro Windows 1.2.1.0 software to construct the GSCA model.

## RESULT AND DISCUSSION

### The Conditions of The Internal Environment, External Environment, Entrepreneurial Competence, Communication, and Business Performance of Owners of Layer Chicken Farming Businesses in Penebel District, Tabanan Regency

The conditions of layer chicken farming businesses in Tabanan Regency are studied through five variables: Internal Environment (LI), External Environment (LE), Entrepreneurial Competence (KW), Communication (KO), and Business Performance (KU). These variables are measured using indicator values obtained from interviews with respondents, who are owners of layer chicken farms. The indicator values are divided into five response options using a Likert scale. Each indicator statement is then calculated to obtain standard deviation values, mean scores, score percentages, and score categories, as shown in the table. The results of these calculations will be analyzed to understand the conditions of layer chicken farming in Tabanan Regency, presented in Table 1.

**Table 1**. Interval Class Values for the Conditions of Internal Environment, External Environment, Entrepreneurial Competence, Communication, and Business Performance of Layer Chicken Farming

| Indicator | Standard Deviation | Mean Score | Percentage Score | Score Category |
|---|---|---|---|---|
| Communication (KO) | 0.41 | 4.32 | 86.42% | Good |
| Internal Environment (LI) | 0.50 | 3.53 | 70.67% | Sufficient |
| External Environment (LE) | 0.80 | 3.16 | 69.61% | Sufficient |
| Entrepreneurial Competence (KW) | 0.52 | 4.30 | 85.94% | Good |
| Business Performance (KU) | 0.52 | 3.94 | 78.76% | Sufficient |
| **Average** | **0.55** | **3.85** | **78.28%** | **Sufficient** |

Source: Primary Data (2024)

Communication in the chicken farming business is measured through eleven indicators. Table 1., shows that the average standard deviation of communication is 0.41, categorized as good with an average score of 4.32 (86.42%). This indicates that the interaction between owners and their employees is well-established through a clear, consistent information flow accepted by all team members. This effective communication fosters a harmonious work environment, enhances

productivity, and supports achieving business performance goals for layer chicken farming in Penebel District, Tabanan.

For the internal business environment measured through 8 indicators, the average standard deviation is 0.50, with an average score of 3.53 (70.67%), categorized as sufficient. This indicates that in managing their business, owners of layer chicken farms maintain a satisfactory internal environment, including ensuring optimal temperature, humidity, and ventilation as per the regulations for layer chicken farming. However, indicators such as research and development are notably low. Farmers often follow existing processes due to financial constraints and concerns about failure, which limit their inclination for research and development in their farming practices.

In the external business environment of layer chicken farming measured through 12 indicators, Table 1 shows an average standard deviation of 0.80, with an average score of 3.16 (69.61%), categorized as sufficient. This indicates that in their relations with external parties such as suppliers for chicken feed, owners consistently provide timely and quality raw materials and medicines without supply disruptions, supporting the operational sustainability of layer chicken farming in Penebel District, Tabanan. Additionally, owners set product pricing terms, particularly for eggs, independently of buyer bargaining power, as they assess market prices before setting their own. However, low scores are observed in cooperation or partnerships, primarily limited to local farmers based on current field conditions. This is due to owners' beliefs that independent operations are more effective and less disruptive than collaborating with others, despite encountering various challenges in their business operations.

For entrepreneurial competence in layer chicken farming in Penebel District, the average standard deviation is 0.52, with an average score of 4.30 (85.94%), categorized as good. This competence is measured through 12 indicators, reflecting that owners have a strong self-concept in planning to start a layer chicken farming business, carefully considering risks before initiating operations. Additionally, owners demonstrate excellent managerial skills in leading and managing teams effectively, motivating employees, and providing clear direction to achieve common goals. Furthermore, they exhibit good intellectual abilities in generating new ideas and thoughts that could potentially be applied to layer chicken farming in Penebel District, Tabanan. Some ideas that can be applied to the strategy or operation of layer farms are the first idea related to optimizing feed management can be done by paying attention to the right nutritional composition based on the growth phase of the chicken and local environmental conditions. The application of local knowledge-based approaches to appropriate diets can improve health and egg production.

Secondly, the idea of farmer community development that focuses on regular exchange of knowledge and best practices can improve farmers' skills and insights, enabling them to be more responsive to changing market and climate conditions. Through the implementation of these ideas, layer farming in Penebel sub-district can be more adaptive and sustainable as perceived by farmers without the need to rely on information technology. Business performance in layer chicken farming is measured through 15 indicators, with an average standard deviation of 0.52 and an average score of 3.94 (78.76%), categorized as sufficient. This indicates that the business performance of layer chicken farming shows good productivity in achieving optimal efficiency in resource utilization for egg production. On average, these farms have successfully increased their profitability by approximately <30% since starting, which is considered quite good. This growth is supported by profit and capital growth reinvested into the farms to sustain operations. However, the industry faces

challenges due to its high capital requirements and fluctuating income, making it difficult for farmers to increase the layer chicken population to boost egg sales growth.

**The Effectiveness of Communication as a Mediating Variable between Internal Environment, External Environment, Entrepreneurial Competence, and Business Performance in Chicken Farming in Penebel District, Tabanan Regency**

In assessing how effective communication mediates to enhance the business performance of layer chicken farming in Tabanan Regency, the analysis is conducted and processed using GSCA Pro Windows 1.2.1.0. The first step involves testing the feasibility of the initial model, and if discrepancies are found, the model undergoes a respecification process. Model testing continues until reaching an adequate level of fit, as assessed by the overall goodness of fit of the model. The next step involves analyzing relationships among variables, including the mediating variable, through evaluating the structural model.

**Evaluation of the Measurement Model**

In evaluating the measurement model, the loading factor values of each indicator serve as an assessment of convergent validity and can be categorized as good if they are $\geq 0.70$ (Leka dan Yanti, 2020; Indriyani *et al.*, 2024). The results of the run to evaluate the measurement model related to validity can be seen in Table 2.

**Table 2.** Results of the Validity Test

| No. | Variables | Indicator | Loading | Results |
|-----|-----------|-----------|---------|---------|
| 1. | KO | $KO_{1.5}$ | 0.982 | Valid |
|    |    | $KO_{1.7}$ | 0.94 | Valid |
| 2. | LI | $LI_{1.1}$ | 0.70 | Valid |
|    |    | $LI_{1.3}$ | 0.99 | Valid |
| 3. | LE | $LE_{1.3}$ | 0.999 | Valid |
|    |    | $LE_{1.8}$ | 0.949 | Valid |
|    |    | $LE_{1.12}$ | 0.991 | Valid |
| 4. | KW | $KW_{1.3}$ | 0.971 | Valid |
|    |    | $KW_{1.7}$ | 0.919 | Valid |
|    |    | $KW_{1.9}$ | 0.898 | Valid |
| 5. | KU | $KU_{1.7}$ | 0.968 | Valid |
|    |    | $KU_{1.9}$ | 0.961 | Valid |
|    |    | $KU_{1.13}$ | 0.981 | Valid |

Source: Primary Data (2024)

The results of the validity test conducted on each indicator indicate that all indicators used have good validity values. Among the eleven indicators for Communication (KO), only $KO_{1.5}$ and $KO_{1.7}$ show the highest loading values. For the Internal Environment (LI) variable, indicators $LI_{1.1}$ and $LI_{1.3}$ perform well. Similarly, in the External Environment (LE) variable, only $LE_{1.3}$, $LE_{1.8}$, and $LE_{1.12}$ show satisfactory loading values. In the Entrepreneurial Competence (KW) variable, indicators $KW_{1.3}$, $KW_{1.7}$, and $KW_{1.9}$ meet the loading factor criteria. Lastly, for the Business Performance (KU) variable, only $KU_{1.7}$, $KU_{1.9}$, and $KU_{1.13}$ meet the loading factor criteria. After

meeting the validity test criteria, to assess the reliability of the constructs, attention is given to the Proportion of Variance Explained (PVE) and Dillon-Goldstein's Rho (Composite Reliability) values. Reliability refers to the consistency of measurement results when facts in research are measured repeatedly over different times. The values of PVE and Rho from the test results can be seen in Table 3.

**Table 3.** Results of the Reliability Test

| No. | Criteria | Variables | | | | |
|-----|----------|------|------|------|------|------|
|     |          | KO | LI | LE | KW | KU |
| 1. | PVE | 0.925 | 0.731 | 0.960 | 0.865 | 0.941 |
| 2. | Rho | 0.961 | 0.840 | 0.986 | 0.951 | 0.979 |

Source: Primary Data (2024)

In the reliability test results, it was found that the Proportion of Variance Explained (PVE) values for all variables KO, LI, LE, and KW meet the criteria of PVE ≥ 0.50. This aligns with the recommendation by Dzakiyyah dan Nugraha (2023), that PVE values should be greater than or equal to 0.50 to be considered reliable. Additionally, the composite reliability of each latent variable construct, indicated by Dillon-Goldstein's Rho values, has shown values greater than 0.7. This indicates that variables KO, LI, LE, KW, and KU have good reliability based on PVE and Dillon-Goldstein's Rho values. According to Ali et al. (2021) to demonstrate convergent validity and composite reliability, PVE values ≥ 0.50 and Rho values ≥ 0.70 are preferable. With good reliability test results across all variables, the next step involves testing the criteria for the goodness of fit of the model.

### Evaluation of Goodness of Fit Model Criteria

The theoretical model in the research framework is considered fit if it is supported by empirical data. The results of the overall model's goodness of fit testing based on GSCA analysis indicate that the model is deemed fit with standard criteria being met, including FIT, AFIT, FITs, FITm, GFI, and SRMR. For a clearer understanding, the results of the goodness of fit analysis are presented in Table 4.

**Table 4.** Fit Measures Result from Overall Goodness of Fit Testing

| Model Fit | | | | | | | | |
|------|------|------|------|------|------|------|------|------|
| FIT | AFIT | FITs | FITm | GFI | SRMR | OPE | OPEs | OPEm |
| 0.884 | 0.871 | 0.859 | 0.893 | 0.99 | 0.073 | 0.178 | 0.37 | 0.105 |

Source: Primary Data (2024)

The FIT value of 0.884, FITs value of 0.859, and FITm value of 0.893 indicate that overall, the model is good because it explains approximately 88.4%, 85.9%, and 89.3% of the variance in the internal environment, external environment, entrepreneurial competence, and communication variables, along with the latent constructs and outer measurement model. According to Hwang et al. (2023), FIT, FITs, and FITm values range from 0 to 1, with no specific cutoffs for FIT to indicate model fit adequacy. FITs indicate the total variance of all components explained by the model specification.

The goodness of fit for the structural model and overall model, assessed through FIT, AFIT, GFI, and SRMR tests, indicates that the complexity of the specified model in this research explains 87.1% of the corrected variance in the data. Additionally, the GFI value of 0.99 and SRMR value of 0.073 suggest a good acceptable fit approaching zero. Based on Cho *et al.* (2022), an indication of acceptable fit can be inferred from GFI values ≥ 0.93 or SRMR values ≤ 0.08. The GFI (Goodness of Fit Index) allows for further discussion and assessment of the inner model.

**Evaluation of Structural Model (Inner Model)**

Assessment of the inner model is evaluated through the path coefficient values and their significance levels, as shown in Table 5.

**Table 5.** Path Coefficients

| No. | Path Coefficients | Estimate | SE | CR |
|-----|------------------|----------|-----|-----|
| 1. | LE→ LI | 0.852 | 0.081 | 10.519* |
| 2. | LI → KW | 1.306 | 0.570 | 2.2912* |
| 3. | LE→ KW | -0.449 | 0.593 | -0.757 |
| 4. | LI → LE | 0.852 | 0.081 | 10.519* |
| 5. | LI → KO | 0.213 | 0.330 | 0.6455 |
| 6. | KW → KO | -0.137 | 0.235 | -0.583 |
| 7. | LE→ KO | 0.890 | 0.209 | 4.2584* |
| 8. | LI → KU | -0.499 | 0.712 | -0.701 |
| 9. | KW → KU | 1.046 | 0.466 | 2.2446* |
| 10. | LE → KU | -1.479 | 1.006 | -1.47 |
| 11. | KO → KU | 1.981 | 0.855 | 2.317* |

Explanation: *(significant)
Source: Primary Data (2024)

The path coefficients from External Environment to Internal Environment, Internal Environment to Entrepreneurial Competence, Internal Environment to External Environment, External Environment to Communication, Entrepreneurial Competence to Business Performance, and Communication to Business Performance show positive relationships with significant influence at a confidence level of 95%. The asterisk (*) indicates that the Critical Ratio (CR) shows their influence is significant because the CR limit is > 1.96. This result signifies that a higher External Environment leads to a higher Internal Environment with a strong influence, as well as other significant variables. The path analysis model from the generalized structured component analysis reveals the estimates of influence on Business Performance for each significant variable as follows:

Business Performance = -0.499 Internal Environment + 1.046 Entrepreneurial Competence - 1.479 External Environment + 1.981 Communication
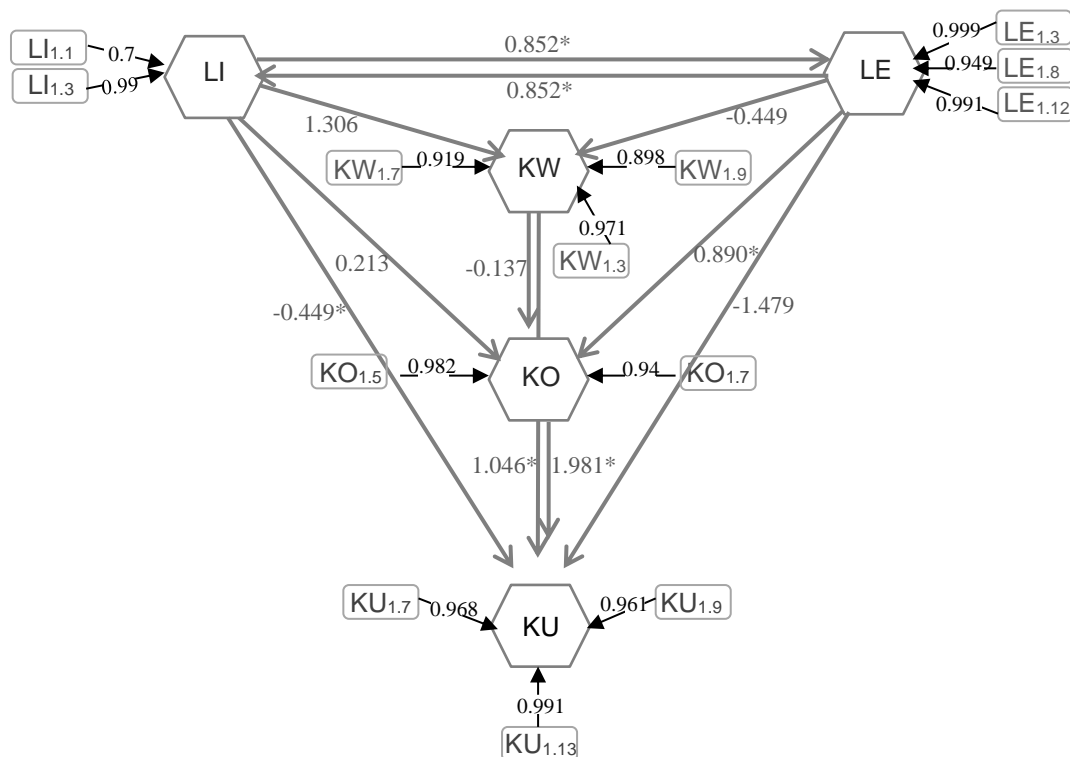
**Figure 2.** Results of the Statistical Communication Model
Source: Primary Data (2024)
(*) = significant at the 5% level

Based on the conceptual framework and the results of the statistical communication model, the testing of this communication model aligns with the criteria as defined by Solimun (2013), This involves testing mediation to determine the nature of relationships between variables, whether they are complete mediation, partial mediation, or not mediating variables. This can be seen in Figure 3.
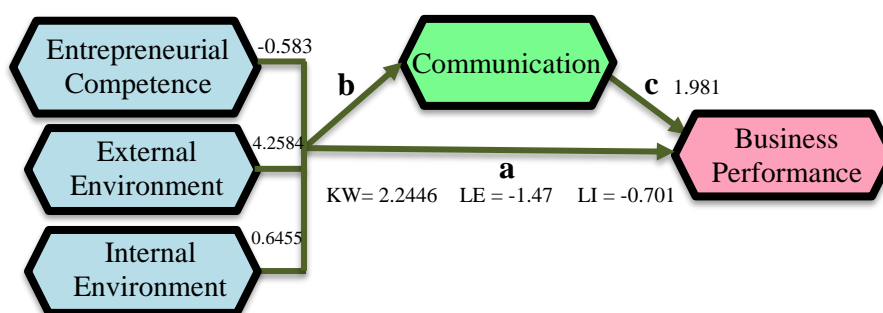


**Figure 3.** Communication Model as a Mediating Variable
Source: Primary Data (2024)

The testing results of the effectiveness of communication as a mediating variable indicate that communication can be categorized as complete mediation, with criteria (b) and (c) being significant, while (a) is not significant. In this case, communication successfully mediates the external environment of laying hen farms in Penebel District, Tabanan. According to Figure 3, the critical ratio value for criterion (b), which shows a significant impact from External Environment to Communication, is 4.2584, indicating that it exceeds the criterion of >1.96. For criterion (c), there is

a significant impact from Communication to Business Performance with a critical ratio of 2.317. Criterion (a), from External Environment to Business Performance is not significant, fitting the definition of complete mediation. Additionally, Entrepreneurial Competence to Business Performance shows significance with a critical ratio of 2.22446, meaning that without passing through the communication variable, Entrepreneurial Competence can enhance business performance in laying hen farms in the Penebel District.

Based on the research and interviews with owners of commercial layer chicken farms in Penebel District, Tabanan, it is indeed true that the external environment cannot be directly implemented without internal communication within the business to enhance the performance of the chicken farming business. Communication ensures proper understanding and adjustment to external changes, such as new policies or technologies. Effective communication facilitates good coordination, proper decision-making, employee motivation, and involvement, as well as effective problem-solving. Without communication, information from the external environment is difficult to adapt and apply, thereby hindering the improvement of the performance of commercial layer chicken farming businesses in Penebel District, Tabanan Regency. Meanwhile, entrepreneurship competencies and the internal environment can directly enhance business performance without intensive communication because both originate from within the commercial layer chicken farming industry. Entrepreneurship competencies such as risk-taking and leadership, and a supportive internal environment including work culture, management systems, and available resources, are already integrated into daily operations. This allows owners of commercial layer chicken farms, particularly in Penebel District, Tabanan Regency, to directly implement strategies and initiatives that can improve efficiency and productivity without needing to adapt external information.

## CONCLUSION AND SUGGESTION

The condition of layer chicken farms in Penebel Subdistrict, Tabanan, especially in the internal and external environment shows a fairly good performance with good organizational communication and entrepreneurial competence. However, there are still challenges in the external aspect of social strength which refers to the minimal cooperation/partnership activities carried out with other local farmers, the tendency is based on the thinking of farmers who are reluctant to cooperate because doing business independently is still considered effective and the business can still run as usual even with various obstacles. The condition of business performance on laying hen farms is in the sufficient category. This means that the performance of this layer breeding business has a good level of productivity in its achievements to produce eggs with optimal efficiency in the use of its resources, however, in this case it is supported by the growth of profits and capital added to the layer breeding business in order to survive, because this business requires large capital while the income of farmers is very fluctuating, so many farmers find it difficult to increase the population of laying hens to increase the growth of chicken egg sales.

The effectiveness of the communication model as a mediating variable in the laying hen farming business in improving business performance has succeeded in effectively mediating the external environment of the business which is classified into perfect mediation (complete mediation). Full mediation occurs when the relationship between the independent and dependent variables becomes insignificant when communication is included in the model, meaning that the entire effect

of the independent variable is transferred through communication. In this study, it was found that communication tends to serve as a full mediation for the external environment, the rest being partial, as it shows that although important, there are other factors that also play a direct role in influencing business performance. Therefore, effective communication is crucial for implementing external environmental factors effectively to enhance business performance. Meanwhile, entrepreneurial competencies and the internal environment can directly improve business performance without extensive communication, as they are already integrated into daily operations.

A suggestion for future research is to explore further the role of internal communication mediation in adapting to changes in the external environment. Regarding the internal environment and entrepreneurial competencies, communication may not be the most suitable mediating variable. Future studies could consider other variables such as organizational culture, management systems, or technological support as potentially more relevant mediators in enhancing business performance. This would help provide a more comprehensive insight into the factors influencing the performance of commercial layer chicken farming businesses in Penebel District, Tabanan Regency.

## REFERENCES

Agung, A.A.I.P.D., Arisena, G.M.K., & Ustriyana, I. N. G. 2022. Start-Up dan Motivasi Berwirausaha Owner Coffee Shop di Kawasan Heritage Puputan Badung. Jurnal Hexagro, 6(2), 128–152. https://doi.org/10.36423/hexagro.v6i2.933

Ali, R., Bashir, F., & Ahmad, R. 2021. Imprints of Lower Socioeconomic Class in English Speaking Anxieties and Academic Performance of Rural and Urban Students. IRASD Journal of Economics, 3(3), 412–425. https://doi.org/10.52131/joe.2021.0303.0055

Arfan, A. 2019. Prediksi Harga Saham Di Indonesia Menggunakan Algoritma Long Short-Term Memory. Seminar Nasional Teknologi Informasi dan Komunikasi STI&K (SeNTIK) (pp. 225-230). 22 Agustus 2019. Retrieved from https://ejournal.jak-stik.ac.id/index.php/sentik/article/view/3190/423

Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173–1182. https://doi.org/https://doi.org/10.1037/0022-3514.51.6.1173

Brink, A., & Costigan, J. 2023. The Impact of Communication on Business Performance: A Review. Journal of Business Communication, 60(2), 245-260. https://doi.org/10.1177/2329488419872689.

Casson. 2010. Entrepreneurship. In International Small Business Journal, 7(3). https://doi.org/10.1177/026624268900700302

Cho, G., Schlaegel, C., Hwang, H., Choi, Y., Sarstedt, M., & Ringle, C. 2022. Integrated Generalized Structured Component Analysis: On the Use of Model Fit Criteria in International Management Research. Management International Review, 62. https://doi.org/10.1007/s11575-022-00479-w

Cohen, L., Manion, L., & Morrison, K. 2007. Research Methods in Education. Routledge Falmer. https://www.scirp.org/reference/referencespapers?referenceid=2016100

Damaryanti, F., Thalib, S., & Miranda, A. 2022. Pengaruh Brand Image Dan Kualitas Layanan Terhadap Keputusan Pembelian Ulang Dengan Kepuasan Konsumen Sebagai Variabel Moderating. Jurnal Riset Manajemen Dan Akuntansi, 2(2), 50–62. https://doi.org/10.55606/jurima.v2i2.253

Dewi, R. U. 2022. Pengaruh Orientasi Kewirausahaan, Inovasi Dan Penggunaan Teknologi Informasi

Terhadap Kinerja Bisnis Melalui Keunggulan Kompetitif Pada Pedagang Pakaian Di Pasar Kliwon Kabupaten Kudus. Jurnal Studi Manajemen Bisnis (JSMB), 2(2), 54–72.

Direktorat Statistik Peternakan Perikanan dan Kehutanan. 2022. Peternakan Dalam Angka 2022. Retrieved:https://ppid.bps.go.id/upload/doc/LAKIN_Direktorat_Statistik_Peternakan_Peri kanan_dan_Kehutanan_2022_1683603936.pdf

Dzakiyyah, N., & Nugraha, J. 2023. UTAUT Model Analysis on E-Wallet Usage of Vocational School Students UTAUT Model Analysis on E-Wallet Usage of Vocational School Students Literature Review And Hypotheses Development. Jurnal Pendidikan Dan Administrasi Perkantoran, 11(2), 86–98.

Hefner, M. 2023. The Importance of Communication in the Agriculture Industry. Journal of Agricultural Education and Communication, 18(3), 345-358. https://doi.org/10.1093/jagec/abc123.

Hwang, H., Cho, G., & Choo, H. 2023. GSCA Pro for Windows User's Manual. https://doi.org/10.13140/RG.2.2.28162.61127

Indraningsih, K. S. 2011. Effects of Extension on Farmers ' Decision in Adopting Integrated Farming Technology. Jurnal Agro Ekonomi, 29(1), 1–24.

Indriyani, Y. R., Yurisinthae, E., Dolorosa, E., & Program, A. S. 2024. Improving The Work Performance Of Agricultural Extension Workers Through Increasing Capacity, Willingness, And Opportunity. Agrisocionomics : Jurnal Sosial Ekonomi Dan Kebijakan Pertanian, 8(3), 97–111. https://doi.org/10.14710/agrisocionomics.v8i1.17482

Lippit, R., Brotman, R., Watson, J., & Westley, B. 1958. The Dynamics of Planned Change. In American Sociological Review 23(3) : 341. https://doi.org/10.2307/2089259

Leka, S. S., & Yanti, T. S. 2020. GSCA Model untuk Menentukan Pengaruh Kualitas Layanan dan Fasilitas Terhadap Kepuasan Mahasiswa Program Studi Statistika FMIPA Univeristas Islam Bandung. Prosiding Statistika, 6(2), 72– 79. http://dx.doi.org/10.29313/.v6i2.22846

Maheswari, J., & Dwiutami, L. 2013. Pola Perilaku Dewasa Muda yang Kecenderungan Kecanduan Situs Jejaring Sosial. JPPP - Jurnal Penelitian Dan Pengukuran Psikologi, 2(1), 51–62. https://doi.org/10.21009/jppp.021.08

Mardikanto, T. 2010. Komunikasi Pembangunan. Sebelas Maret Press. Retrieved from: https://digilib.uns.ac.id/

Maryam, M. H., Sugiarti, T., & Nugroho, T. R. D. A. 2022. Analysis Of Breeder Motivation In Raising Madura Cattle At West Waru Village, Waru District, Pamekasan Regency. Agrisocionomics : Jurnal Sosial Ekonomi Dan Kebijakan Pertanian, 2(2), 253–268. https://doi.org/https://doi.org/10.14710/agrisocionomics.v6i2.13997

Muatip, K. 2008. Kompetensi Kewirausahaan Peternak Sapi Perah: Kasus Peternak Sapi Perah Rakyat Di Kabupaten Pasuruan Jawa Timur Dan Kabupaten Bandung Jawa Barat. Disertasi. Sekolah Pascasarjana Institut Pertanian Bogor. Retrieved from : In IPB Repository https://repository.ipb.ac.id/handle/123456789/95249

Muharastri, Y. 2013. Karakteristik Wirausaha, Kompetensi Kewirausahaan dan Kinerja Usaha Peternakan Sapi Perah di KTTSP Kania Bogor. Tesis. Sekolah Pascasarjana Institut Pertanian Bogor. Retrieved : http://repository.ipb.ac.id/bitstream/handle/123456789/67125/2013ymu.pdf

Mujyambere, V., Adomako, K., Olympio, S. O., Ntawubizi, M., Nyinawamwiza, L., Mahoro, J., & Conroy, A. 2022. Local chickens in East African region: their production and potential. Poultry Science, 101(1). https://doi.org/10.1016/j.psj.2021.101547

Nisa, L. 2020. Pengaruh Ketidakpastian Lingkungan dan Karakteristik Kewirausahaan Terhadap Kinerja Usaha Mikro Kecil dan Menengah (UMKM) Ayam Potong di Pasar Ujungberung Kota Bandung. Tesis. Universitas Komputer Indonesia (UNIKOM). Retreved from https://elibrary.unikom.ac.id/id/eprint/3794/

Nursiah, T., Kusnadi, N., Burhanuddin, D., Ekonomi, F., Manajemen, D., Pertanian Bogor, I.,

Pengajar, S., & Agribisnis, D. 2015. Perilaku Kewirausahaan Pada Usaha Mikro Kecil (UMK) Tempe Di Bogor Jawa Barat. Jurnal Agribisnis Indonesia, 3(2), 145–158.

Prastyo, D., & Kartika, I. N. 2017. Analisis Faktor-Faktor Yang Mempengaruhi Produksi Ayam Broiler Di Kecamatan Marga, Kabupaten Tabanan. Piramida, 13(2), 79–87. https://erepo.unud.ac.id/id/eprint/19496

Puspitawati, N., Sudarma, M., & Djelantik, A. 2015. Analisis Profitabilitas Peternakan Ayam Ras Petelur Pada Ud Bs (Biyase) Desa Babahan, Penebel District, Kabupaten Tabanan. E-Journal Agribisnis Dan Agrowisata (Journal of Agribusiness and Agritourism), 4(4), 278–288.

Rahmi, K. 2015. Pengaruh Perilaku Kewirausahaan Petani terhadap Kinerja Usaha pada Sistem Integrasi Tanaman dan Ternak (Kasus : di Kabupaten Lima Puluh Kota Provinsi Sumatera Barat). Tesis. 1–88.

Sugiono, S. 2010. Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan Research & Development.

Safitri, R. 2024. Pengaruh Jiwa Kewirausahaan Dan Manajemen Agribisnis Terhadap Keberhasilan Usaha Ikan Patin Di Kabupaten Kampar. Tesis. Institut Pertanian Bogor.

Setiadi, A., Santoso, S. I., Nurfadillah, S., Prayoga, K., Sciences, A., & Diponegoro, U. 2022. Economics Of Egg Price, Consumption, And Income Of Laying Hen Farmers During Of Covid-19 Pandemic In Central Java, Indonesia. Agrisocionomics : Jurnal Sosial Ekonomi Dan Kebijakan Pertanian, 6(11), 393–401. https://doi.org/https://doi.org/10.14710/agrisocionomics.v6i2.15646

Siregar, S. 2014. Statistik Parametrik Untuk Penelitian Kuantitaif Dilengkapi Dengan Perhitungan Manual dan Aplikasi SPSS Versi 17 (Ed.1; Cet.). Bumi Aksara.

Spencer, L., & Spencer, S. 1993. Competence at work : models for superior performance. New York : Wiley. https://archive.org/details/competenceatwork00spen/page/n391/mode/2up

Suardi, I. D. P. O., Widhianthini, Arisena, G. M. K., Suyarto, R., & Krisnandika, A. 2022. Management Policies Implication for the Agricultural Land Conversion Sustainable Control Strategy in Bali Province. Journal of Environmental Management and Tourism, 13(3 (59)), 721–731. https://doi.org/https://doi.org/10.14505/jemt.v13.3(59).12

Suardi, I., Widhianthini, Arisena, G., Sukewijaya, I., & Krisnandika, A. 2023. Status Of Agriculture Resources Sustainability And Agricultural Policy In Denpasar City, Province Of Bali, Indonesia. African Journal of Food, Agriculture, Nutrition and Development, 23(3), 22694–22710.

Wardyaningrum, D. 2012. Komunikasi kelompok dan pengembangan potensi masyarakat peternak sapi perah di Lembang Jawa Barat. Tesis. Universitas Al Azhar Indonesia. Retrieved from http://eprints.uai.ac.id/id/eprint/1204