

Business Feasibility Analysis for the Development of the Semadi Putra Chicken Slaughterhouse Business

Ni Luh Kardini¹
Universitas Mahendradatta

Ni Putu Andini Desiyanti Laksmi²
Universitas Mahendradatta

Nadilah Sukmawati³
Universitas Mahendradatta

Correspondence : Ni Luh Kardini (kardini.mahayoga@gmail.com)

Abstract

This study evaluates the feasibility of developing PT Semadi Putra, a chicken slaughtering and fresh-broiler distribution business in Denpasar, Bali. The assessment integrates market and marketing, technical and operational, legal, management and human resources, financial, socio-economic, and environmental aspects. A descriptive design combining qualitative and quantitative evidence was applied. Primary data were obtained through observation and in-depth interviews; internal respondents comprised 12 owners and employees using census sampling, while business-to-business customers were selected purposively. Secondary data included company financial records for 2022-2025. SWOT analysis was combined with Net Present Value, Internal Rate of Return, Payback Period, Profitability Index, and Break-Even Point analysis. A proposed Rp200,000,000 investment generated a positive NPV, an IRR above the discount rate, a short payback period, and a PI above one. The development is feasible if implemented in stages, with NKV and halal certification, wastewater treatment, operational standardization, and stronger internal governance completed before full capacity expansion.

Keywords: business feasibility; SWOT analysis; chicken slaughterhouse; investment analysis; business development

Introduction

Chicken meat occupies an important position in the food-service supply chain because it is relatively affordable, widely accepted, and can be distributed in whole-carass or cut-part formats. For slaughtering and processing businesses, growth opportunities are therefore linked not only to demand, but also to the ability to maintain product freshness, process hygiene, reliable delivery, and cost control. Empirical work on poultry processing shows that investment appraisal is particularly important because high operating costs can quickly erode attractive projected returns when revenue or input-price assumptions change (Etuah et al., 2021). Indonesian poultry studies similarly show that financial and operational feasibility should be evaluated before capacity expansion rather than inferred from sales growth alone (Tyas, 2020; Wardana et al., 2021).

PT Semadi Putra is a long-established chicken slaughtering and distribution business in Denpasar. The business has operated for more than thirteen years and currently processes approximately 200-250 birds per day, with around 70% of sales directed to business-to-business customers such as market traders, food stalls, caterers, and restaurants. The development plan seeks to increase output to approximately 350-400 birds per day through equipment modernization, improved production layout, additional cold-storage capacity, and stronger market penetration. Studies of broiler enterprises in Indonesia indicate that profitability and business sustainability depend on production efficiency, selling prices, partnership arrangements, and environmental management, reinforcing the need for a multidimensional assessment (Fauzi & Lestari, 2023; Utami et al., 2024).

Expansion of a poultry slaughtering business also creates compliance and environmental obligations. Slaughtering generates blood, feathers, offal, suspended solids, nutrients, and wastewater that require systematic handling before discharge. Experimental studies have shown that poultry-slaughterhouse wastewater can contain substantial pollutant loads and that integrated physical and electrochemical treatment systems can materially improve effluent quality (Meiramkulova et al., 2020a, 2020b, 2020c; Meiramkulova et al., 2021a, 2021b; Mkilima et al., 2022). In the Indonesian regulatory context, animal-product business units are subject to veterinary control certification requirements, while halal assurance is governed by the current national halal-product framework (Ministry of Agriculture of the Republic of Indonesia, 2020; Government of the Republic of Indonesia, 2024). These requirements are commercially relevant because institutional buyers increasingly expect documented food-safety and halal assurance.

Organizational readiness is another factor in successful growth. Digital bookkeeping, customer databases, online ordering, and more systematic communication can reduce dependence on informal records and improve responsiveness. Evidence from SMEs shows that digital transformation can support business-model adaptation, productivity, customer engagement, and performance when implementation is aligned with organizational capability and strategy (Becker & Schmid, 2020; Priyono et al., 2020; Kádárová et al., 2023; Sharabati et al., 2024). For PT Semadi Putra, this means that machinery investment should be accompanied by improved delegation, standard operating procedures, production records, and digital financial administration.

The research gap addressed in this study is the tendency to evaluate small poultry businesses primarily through profitability or selected operational indicators. This study integrates SWOT analysis with seven feasibility dimensions and investment criteria to

determine both whether the proposed development is financially attractive and whether the organization is ready to implement it responsibly. The objective is to assess the feasibility of PT Semadi Putra's development plan and to formulate a phased implementation sequence that links compliance, operational modernization, internal governance, and market expansion.

Methods

This research used a descriptive design combining qualitative and quantitative evidence and was conducted in Denpasar, Bali, during March-May 2026. The fieldwork and historical records were originally collected when the business still used the legal name CV Semadi Putra. Because the company has subsequently changed its legal form, the current name PT Semadi Putra is used throughout this article; references to historical records therefore describe the same continuing business entity.

The internal population consisted of 12 people, including the owner and employees working in administration, production, marketing, and distribution. Because the internal population was small, all 12 were included using census sampling. External respondents were business-to-business customers selected purposively according to three criteria: at least one year of partnership, routine purchases at least once a week, and willingness to provide information on product and service quality. This sampling logic follows the use of census and purposive approaches for context-specific descriptive research (Sugiyono, 2019). Primary data were collected through direct observation and in-depth interviews. Secondary data consisted of internal financial statements for 2022-2025, monthly sales data for 2025, business-permit documents, and supporting literature.

Qualitative analysis covered seven feasibility aspects: market and marketing; technical and operations; law and legal compliance; management and human resources; finance; socio-economic effects; and environment. Internal strengths and weaknesses and external opportunities and threats were synthesized in a SWOT matrix. The financial projection covered 2026-2030 and used an initial investment of Rp200,000,000, assumed annual revenue growth of 10%, an operating-cost ratio of approximately 95.5% of revenue, and a 12% annual discount rate. The investment was considered feasible when NPV was positive, IRR exceeded the discount rate, Payback Period was shorter than the five-year projection period, and Profitability Index exceeded one (Kardini, 2025). A Break-Even Point estimate was also used to compare the minimum annual sales volume with the company's historical operating volume.

The qualitative and quantitative results were interpreted jointly. Financial attractiveness was not treated as sufficient on its own; the final decision also considered compliance,

sanitation, organizational control, market access, and the practical sequence in which development actions could be implemented.

Results and Discussion

Business Profile and SWOT Findings

PT Semadi Putra operates as a small and medium-sized enterprise engaged in slaughtering and distributing fresh broiler meat. Its Denpasar location supports access to suppliers and customers, while more than thirteen years of operating experience has created stable relationships with business-to-business buyers. Current production is approximately 200-250 birds per day, and the development plan targets 350-400 birds per day over two years through semi-automatic equipment, layout improvement, and additional cold-storage capacity.

The SWOT assessment indicates that the expansion is supported by a loyal customer base, same-day freshness, direct delivery, competitive prices, and a positive revenue trend. The main internal constraints are limited capacity, incomplete NKV and formal halal certification, manual bookkeeping, owner dependence, inadequate wastewater treatment, and limited promotion. External opportunities include continued food-service demand, digital marketing, financing access, and the hotel-restaurant-catering market, while the principal threats are live-bird price volatility, disease, rising energy costs, tighter food-safety expectations, and competition from certified slaughterhouses.

Table 1. SWOT Summary of PT Semadi Putra

SWOT factor	Key findings
Strengths	Strategic Denpasar location; >13 years of experience; loyal B2B customers; same-day freshness; positive revenue growth; competitive pricing; direct delivery.
Weaknesses	Capacity of about 200-250 birds/day; NKV and halal certification not completed; manual bookkeeping; owner dependence; inadequate IPAL; limited promotion.
Opportunities	Growing food-service demand; tourism and culinary activity; business financing; digital marketing; premium HOREKA segment; broader institutional market.
Threats	Live-bird price fluctuation; certified competitors; stricter food-safety requirements; energy costs; poultry disease; changing customer preferences.

Source: Researcher synthesis from observations and interviews at PT Semadi Putra (2026).

The SWOT findings suggest that capacity expansion is defensible only if organizational and compliance weaknesses are corrected simultaneously. This interpretation is consistent with evidence that SME digitalization works best when technology adoption is integrated with strategy and internal capability rather than treated as a stand-alone tool (Becker & Schmid, 2020; Priyono et al., 2020).

Evaluation of Seven Feasibility Aspects

The integrated feasibility assessment shows that market demand and existing operational experience provide a strong basis for development, whereas legal and environmental readiness remain conditional. This distinction is important because financially attractive food-processing investments can still face market-access and operational risks if sanitation, documentation, and waste management are not standardized.

Table 2. Integrated Evaluation of Seven Feasibility Aspects

Feasibility aspect	Main evidence	Assessment
Market and marketing	Stable demand; B2B accounts for about 70% of sales; expansion targets restaurants, hotels, caterers, and institutional buyers.	Feasible
Technical and operations	Existing site is adequate; dirty and clean zones need clearer separation; equipment upgrade supports 350-400 birds/day.	Feasible
Law and legal compliance	NIB is available; NKV and formal halal certification should be completed before premium-market expansion.	Feasible with conditions
Management and HR	Twelve employees support current operations; stronger delegation, written SOPs, a production supervisor, and added staff are required.	Feasible
Finance	Historical growth and investment indicators support expansion under the stated assumptions.	Highly feasible
Socio-economic	Expansion can create 3-4 additional local jobs and increase purchases from partner farmers.	Feasible
Environment	Blood, feathers, offal, and wastewater require documented handling and an IPAL before higher output.	Feasible with conditions

Source: Researcher analysis of field observations, interviews, internal documents, and financial calculations (2026).

Market, Technical, Legal, Environmental, and Management Findings

The market and marketing aspect is feasible because PT Semadi Putra already has repeat B2B demand and can use its established customer relationships to absorb incremental output. The development strategy should emphasize reliability, freshness, cut specifications, delivery schedules, and documented hygiene rather than competing on price alone. Whole carcasses and cut products can be supported by digital ordering and a basic customer database. Evidence from SMEs indicates that digital channels can improve customer engagement and market reach, although they generate value only when linked to consistent operational processes (Kádárová et al., 2023; Sharabati et al., 2024).

The technical and operational aspect is also feasible, provided that the production flow is reorganized to separate dirty and clean activities. Receiving live birds, slaughtering, and defeathering should not intersect with evisceration, washing, cutting, and packaging. The

planned plucker, poultry cutter, freezer or chiller, and layout improvements can reduce handling bottlenecks and support the higher target capacity. Investment studies in poultry businesses similarly show that technical capacity and operating efficiency must be evaluated together with financial returns (Etuah et al., 2021; Wardana et al., 2021).

Legal and environmental aspects are feasible with conditions. The business already has a Business Identification Number, but NKV and formal halal certification should be completed before pursuing premium institutional buyers. The slaughtering process also produces wastewater and organic residues that can create odor, pest, drainage, and groundwater risks if unmanaged. Research on poultry-slaughterhouse wastewater demonstrates that treatment performance improves when processes are designed specifically for the high organic and nutrient load of this waste stream (Meiramkulova et al., 2020a, 2020b, 2020c; Meiramkulova et al., 2021a, 2021b; Mkilima et al., 2022). Therefore, a fit-for-scale IPAL and documented waste-handling procedures should precede full capacity expansion.

The management and human-resource aspect is feasible but requires a transition away from excessive owner dependence. A production supervisor should monitor hygiene, output, attendance, equipment use, and sanitation records, supported by two to three additional production workers and one delivery worker as demand grows. Digital bookkeeping should replace manual recording so that revenue, costs, margins, inventory, and customer receivables are available for routine managerial review. The recommended governance changes align with SME evidence showing that digital tools are more effective when accompanied by organizational learning, clear responsibilities, and strategic adaptation (Priyono et al., 2020; Becker & Schmid, 2020).

Financial Performance and Investment Feasibility

Historical performance provides a positive basis for expansion. Revenue increased from Rp823.05 million in 2022 to Rp2.094 billion in 2025, while recorded net profit rose from Rp29.22 million to Rp95.28 million. Monthly sales in 2025 were relatively stable: the highest recorded revenue occurred in May and December, while August was the lowest month. The pattern supports using a conservative rather than aggressive growth assumption in the five-year projection.

Table 3. Historical Financial Performance, 2022-2025

Year	Revenue (Rp)	Total cost (Rp)	Net profit (Rp)	Margin
2022	823,050,000	793,881,725	29,218,275	3.55%
2023	1,230,000,000	1,168,500,000	61,500,500	5.00%
2024	1,980,200,000	1,909,902,900	70,297,100	3.55%
2025	2,094,100,000	1,998,818,450	95,281,550	4.55%

Source: Internal financial data of PT Semadi Putra, processed by the researcher (2026).

The projection assumes an initial investment of Rp200,000,000 for layout renovation, a plucker, a poultry cutter, cold-storage equipment, and working capital. Under the 10% annual revenue-growth assumption and approximately 95.5% operating-cost ratio, annual net cash flow increases across the projection horizon and cumulative cash flow becomes positive in 2027.

Table 4. Projected Cash Flow, 2026-2030

Year	Revenue (Rp)	Total cost (Rp)	Net cash flow (Rp)	Cumulative NCF (Rp)
2026	2,303,510,000	2,199,852,050	103,657,950	-96,342,050
2027	2,533,861,000	2,419,837,255	114,023,745	17,681,695
2028	2,787,247,100	2,661,820,981	125,426,120	143,107,815
2029	3,065,971,810	2,928,003,079	137,968,731	281,076,546
2030	3,372,568,991	3,220,803,386	151,765,605	432,842,151

Source: Researcher projection based on PT Semadi Putra historical data (2026).

Table 5. Investment Feasibility Indicators

Criterion	Result	Decision rule / benchmark	Decision
Net Present Value	Rp246,524,110	NPV > 0	Feasible
Internal Rate of Return	51.30%	IRR > 12% discount rate	Feasible
Payback Period	1 year 10 months	PP < 5 years	Feasible
Profitability Index	2.23	PI > 1	Feasible
Break-Even Point	53,611 birds/year (~148 birds/day); Rp1,871,114,861/year	Historical volume >200 birds/day	Operating volume above BEP

Source: Researcher calculations from the 2026-2030 projection and 2025 cost structure (2026).

The positive NPV indicates that the proposed investment adds value after the time value of money is considered. The IRR is substantially above the 12% discount rate, the Payback Period is shorter than the five-year project horizon, and the PI is above one. These findings are directionally consistent with investment-feasibility studies in poultry enterprises where positive NPV and an IRR above the discount rate support expansion decisions (Etuah et al., 2021; Tyas, 2020; Wardana et al., 2021).

The Break-Even Point adds an important operating perspective that was not emphasized in the previous article draft. Based on the 2025 cost structure, the estimated BEP is 53,611 birds per year, or approximately 148 birds per day, with break-even sales of approximately Rp1.871 billion per year. Historical operating volume above 200 birds per day therefore provides a margin above the estimated break-even volume. Nevertheless, the analysis remains a pre-investment projection and does not include a full sensitivity analysis. Changes in live-bird prices, demand, energy costs, interest rates, or the operating-cost ratio could materially

alter the projected returns; poultry feasibility studies show that profitability can be sensitive to cost and revenue shocks (Etuah et al., 2021; Fauzi & Lestari, 2023; Utami et al., 2024).

Strategic Roadmap and Managerial Implications

The SWOT and feasibility findings indicate that the development should be phased. The first phase should reduce compliance and environmental risk; the second should improve production capacity and internal governance; and the third should use the stronger operating platform to enter premium B2B and HOREKA markets. This sequence avoids committing the entire investment to equipment before the business is ready to satisfy buyer documentation, sanitation, and process-control requirements.

Table 6. Phased Implementation Roadmap

Implementation phase	Priority actions	Timing
Phase 1: compliance and sanitation	Build IPAL; document waste handling and sanitation SOPs; complete NKV and halal certification; separate dirty and clean production zones.	Before capacity expansion
Phase 2: modernization and governance	Purchase semi-automatic equipment and cold storage; recruit and train staff; appoint a production supervisor; adopt digital bookkeeping and daily production records.	After compliance readiness
Phase 3: market growth	Target HOREKA and institutional buyers; implement digital ordering and customer records; strengthen supplier and customer agreements.	After capacity stabilizes

Source: Researcher synthesis of feasibility and SWOT findings (2026).

Risk management should be embedded in each phase. Live-bird price volatility can be reduced through supplier diversification, purchase planning, and periodic price review. Disease risk requires biosecurity, access control, cleaning and disinfection, and supplier communication. Energy-cost risk requires preventive maintenance and cold-storage monitoring. Demand risk can be moderated by balancing traditional-market customers with restaurants, caterers, institutional buyers, and household orders.

The managerial implication is that NKV, halal assurance, and wastewater management should be treated as market-enabling capabilities rather than administrative burdens. Certification and documented sanitation can strengthen buyer confidence and facilitate entry into more demanding customer segments. At the same time, digital bookkeeping and customer management can improve decision quality and reduce dependence on the owner's memory and personal control. SME research supports this combination of process formalization and digital

adoption as a basis for more scalable performance (Kádárová et al., 2023; Sharabati et al., 2024).

The study has limitations. It evaluates a pre-investment plan using internal financial information and field evidence collected during a limited period. The projection assumes 10% annual revenue growth and a stable operating-cost ratio, and it does not estimate alternative price-volume scenarios. Future research should compare projected and actual performance after implementation and conduct sensitivity or scenario analysis for changes in live-bird prices, capacity utilization, operating costs, financing rates, and premium B2B demand.

Conclusion

PT Semadi Putra's proposed development is feasible when evaluated across market, technical and operational, management, socio-economic, and financial dimensions, but implementation should not begin with capacity expansion alone. Legal compliance and environmental management remain the main conditions that must be resolved before the business moves into a larger and more demanding market. The appropriate sequence is to strengthen veterinary and halal compliance, wastewater and sanitation management, and production zoning; then modernize equipment, records, delegation, and workforce capability; and finally expand toward premium B2B, HOREKA, and institutional customers. This phased approach links investment decisions with operational readiness and reduces the risk that additional capacity will outpace internal control. Future evaluation should use post-implementation data and sensitivity analysis to test whether the projected benefits are maintained under changes in input prices, demand, financing conditions, and capacity utilization.

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