Integrated Supply Chain Management Model of Small-Scale Organic Farming Businesses

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Abstract

This study aims to evaluate Prayogi's small-scale business experiencing profit stagnancy using a comprehensive business management approach from the aspects of operations, marketing, human resources, and finance. The study of the operational aspect includes the development of products and operating systems, the marketing aspect includes the concept of the marketing mix. The human resource aspect includes the concept of motivation to achieve business performance, and the financial aspect includes the charging of costs and investment feasibility. This qualitative research with primary and secondary qualitative and quantitative data uses a recruitment method in the form of in-depth interviews and observations as well as documentation studies. The business development efforts that have been implemented are studied using a comprehensive approach from all these aspects with the triangulation method and investment feasibility for financial data. This study with a comprehensive management approach is expected to provide analysis results in the form of a design business management model to be used in order to optimize business potential and overcome business obstacles that have been perceived by business actors. With organic agricultural land management through integrated outlets, it can optimize the entire process from land cultivation to processing and distribution of finished products to consumers. This model is able to improve the financial performance of farmer partners who have only been able to process but do not have access and market network to distribute their crops.

Keywords: *small business, organic farming, farmer empowerment, business performance, sustainability*

INTRODUCTION

The proportion of micro and small enterprises in Indonesia, which reached more than 95%, contributed to the absorption of labor by 59.3% (The SMERU Research Institute, 2023), but in general there are limitations in access to additional capital due to limited business managerial skills (Suci, 2017). Prayogi Business is a small business located in Gunungpati based on crops in the form of papayas, bananas, and various types of cassava. This business started in 2017 where the crops were directly sold to consumers directly or through traders in several traditional markets in the city of Semarang and its surroundings. In addition, it is also to micro-scale cassava chip operators in the vicinity. During the harvest season with abundant yields, not all of these crops can be absorbed by the market. This condition causes losses due to the relatively short shelf life of the harvest. As a solution, business owners sell it to middlemen or collectors at prices far below the market price.

At the end of 2019, business owners began to schedule the initial planting so that the number of harvests is relatively small and can be absorbed by the market and the continuity of harvests can still be maintained. However, this condition can only last towards mid-2020 due to the Covid 19 pandemic accompanied by a decline in people's purchasing power and policies to limit physical interaction. During the recovery period in 2021, Prayogi's business again managed its plantation land business, but using superior seeds. Land management based on organic garden land with manure and planting at a certain distance to optimize crop yields. With better crop quality, this business has been able to distribute through several modern markets in Semarang and its surroundings. Some of the cassava harvest is processed into tape itself and distributed through the modern market. In its development, this business has experienced an increase in the quantity and quality of crops, and has even become a supplier of raw cassava for the tahiland cassava food business. Currently, the business has been developed for pandan plants whose leaf types are wide and become the main supplier of the talam cake food business with certain dimensions ready to use (*work in process*). The total land managed by Prayogi's business covers an area of almost 5 hectares, of which most of it is still leased land. In managing the entire business, we use permanent and freelance employees.

Although in general there has been an increase in business income, this business still often encounters obstacles, especially in meeting the specifications standards for crop yields, cassava tape, and pandan leaves. Several times it has been returned by distributors and food production businesses due to non-conformities. In addition, several business expenses such as damage to production equipment, increase in seed prices and other production costs, disruption of transportation facilities for the distribution of crops and products have had an impact on financial performance which is perceived by business actors to be relatively difficult to control.

From the business management that has been carried out by Prayogi's business owners, it is necessary to evaluate with a comprehensive managerial approach from the aspects of marketing, operations, human resources, and finance so that it will achieve the research goal in the form of designing a business development model that is in accordance with its characteristics. The urgency of this research is related to the results of the research that is recommended to be implemented, because this business is based on environmental conservation (organic plantation land) and empowerment of the surrounding community.

THEORITICAL REVIEW

Small Businesses in Indonesia

The concept of small business development has largely used the basis of a comprehensive management approach (Christiana, Bahagia, Putri, & Sitorus, 2022) accompanied by the ability to conduct business communication. A comprehensive management approach is used to review and even to formalize small business development strategies. This study covers not only internal but also external aspects which include aspects of marketing management, operations, human resources, and finance, but also the environment (Rahmadani, 2022). The concept of entrepreneurship that includes all these aspects is needed in the management of micro, small, and medium enterprises in Indonesia. In several educational institutions, this concept has been conveyed in primary, secondary, and higher education (Rindrayani, 2016). However, the implementation in the practice of MSMEs in Indonesia has not been carried out effectively due to a) limited managerial capabilities, b) difficulty in obtaining access to capital, c) business financial administration that is still integrated with personal/family finance, d) products that have not been standardized, e) limited market access, and f) do not have a business license. These various limitations and obstacles make it relatively difficult for businesses to maintain their sustainability.

Business Management

Business management using a management aspect approach includes aspects of marketing management, operations management, human resource management, and financial management. In marketing management, the concepts of segmenting, targeting, and positioning are used to achieve efficiency in better understanding the needs and desires of the market, more consistent decision-making, and setting the right marketing strategy to achieve competitive advantage (Kotler & Keller, 2017). To realize it, a study of the marketing mix is needed which includes products, prices, distribution, and promotions. Products that are in accordance with the specifications needed and desired by the market at prices according to consumer purchasing power, but are also able to cover production costs. A product distribution system that supports the ease of market reach in obtaining the product. Accompanied by promotional methods to encourage market interest in buying the product will be able to improve sales performance. By conducting a comprehensive study of the food mix, it can affect the market, especially the target market. Some of the inhibiting factors to achieving a comprehensive implementation of the marketing mix (Hidayah, Ariefiantoro, & Nugroho, 2021) are fragmented market conditions, lack of capital for product development, and inappropriate product specifications.

From the aspect of operation management, product design is required in accordance with the specifications of the targeted market segment. In a series of operating systems that are integrated from upstream to downstream, starting from business partners to supply all the resource needs needed in the production process. The products produced are sought in accordance with the standards that have been set for distribution to consumers (Heizer, Render, & Munson, 2024). In carrying out product development, stages are needed starting from looking for ideas from various sources of ideas, both internal and external, such as technological developments, experts in the field of management, direct consumers or distributors, and even from competitors. The next development idea is selected with at least three criteria, both market suitability, financial suitability, and operational suitability. From this initial selection, a basic design process (*prototype*) can be carried out to be tested internally technically, as well as external testing from the market or consumers. Various inputs from the test results are used to refine the design of new product development that is processed in an integrated operating system from upstream to downstream.

The sustainability of small businesses is greatly influenced by their entrepreneurial characteristics which are related to their entrepreneurial motivation (Nailan, Sariah, & Wahyuni, 2024). The motivational concept of David McClelland that is related is the *need for achievement* in the achievement format. From the results of the Nailan, Sariah, and Wahyuni's (2024) research, achievements as entrepreneurs are not only oriented towards achieving profits, but also business performance that can be enjoyed by the environment, both the environment around their business and business partners and also the community as consumers. In the understanding of company management, business performance from a community perspective will affect the satisfaction of consumers who have the potential to become customers. The need for this achievement can also be related to how the entrepreneur responds to potential business opportunities to improve his business performance (Romli, 2019). Accompanied by creativity in innovating products, the products produced are expected to meet the desires and needs of the market and maintain business sustainability.

Business performance is measured using a financial management aspect approach. The efforts made by business actors in achieving profits and increasing their assets can be measured and assessed their success in the financial performance of the business (Mufid, Sahabuddin, Anwar, Burhanuddin, & Ruma, 2023). However, the literacy of small-scale business actors towards business financial management in general is still relatively low. This low financial literacy shows a negative influence on business financial performance. Observing that the role of MSMEs in Indonesia in the absorption of labor and players is important in local economic development and community empowerment, it is necessary to increase the literacy of adequate business financial management (Putri & Sungkono, 2023). In small organic farming businesses in the Kandri area which have a farming base, cassava or cassava have considerable potential along with the increase in market interest in this generic food (Damayanti, 2025). Thus, business sustainability will be maintained and even business competitiveness will increase.

Agricultural Product-Based Business Environmental Management

Environmental damage occurs a lot as an impact of activities in the business world. In accordance with Law number 22 of 2019 concerning Sustainable Agricultural Cultivation Systems (Tri, Asiaka, & Ludang, 2022) which is defined as the management of biological natural resources in producing agricultural commodities to meet human needs better and sustainably by preserving the environment. However, in its application, there are still many agricultural lands in Indonesia that use pesticides for economic considerations, which are more oriented towards pest-free crops, harvest time frequency and greater quantity. Efforts to achieve agricultural management are not easy, because they must harmonize three main dimensions, namely the sustainability of economic business (profit), the sustainability of human social life (people), and the sustainability of natural ecology (planet) (Lagiman, 2020). The three dimensions in the implementation of sustainable agriculture are in line with and support the achievement of three pillars in the concept *of Sustainable Development Goals* (SDG's).

There are five important criteria in agricultural management to meet the criteria of sustainability, namely (1) economic feasibility, (2) Nuanced and ecological, (3) Socially accepted, (4) Cultural satisfaction, and (5) systematic and holistic approach (Lagiman, 2020). These five criteria reflect that the concept of sustainable agriculture is not only oriented towards crops that are safe to be processed and consumed with adequate economic value, but also the preservation of land and ecosystems that can still be used and utilized by future generations. To achieve a more integrated circular economy, several indicators that are more relevant to the conditions of the research unit are needed (de Pascale, 2021). For conditions in the Kandri 17 area, this environmental management has been implemented in the cultivation of organic agricultural land using manure and without pesticides.

RESEARCH METHODS

This research is qualitative research with the research object of Prayogi's small business based on organic plantation products in the Gunugpati area, namely bananas, papayas, cassava, and pandan leaves. The subjects in this study are small business actors who manage the business. The object of the research was chosen because the characteristics of the problem are related to the managerial limitations of business management whose study is in accordance with the competence of the researcher, namely in the field of management

The types of data needed in the research are in the form of primary data which includes the perception of small business actors regarding business management comprehensively from the aspects of marketing market segments, promotion methods, distribution, sales), operations (resource management, production processes, production facilities, products and product development processes), human resources (motivation to achieve achievement in achieving business performance), and finance (costs, pricing, business income). Qualitative and quantitative data were recruited using in-depth interview and observation methods. In addition, secondary data with a documentation study method is also needed. In addition to small business actors, the data will also be recruited from small business partners, namely traders who distribute and supplier organic seeds and fertilizers.

Quantitative data related to finance is processed using the following investment feasibility method

a. *Net Present Value* (NPV)

It is an estimate of future cash flows that have been discounted at this time. To calculate the Net Present Value, it is necessary to collect data on initial cash outflows, estimated net cash outflows in the future, and the desired minimum rate of return. The NPV value is calculated by the following formula:

$$NPV = \frac{R_t}{(1+i)^t}$$

where:
R = *net cash flow* in period t
i = *Discount rates* (10%)
t = period *Cash flow*
If the NPV value is positive, then the investment is declared feasible and acceptable because the estimated income is greater than the estimated expenses, while if the NPV value is negative, the investment is declared unfeasible.

b. *Return Period* (PP)

Payback Period is a method to negate the feasibility of an investment that is measured by the length of time of return on investment value. The smaller (shorter) the investment tax figure, the more feasible it is assuming the conditions of the business environment, economy, and business characteristics. It can be calculated with the following formula:

Payback Period = n + (a – b) / c × 1 year

where:
n: The last period (years) before the investment closed.
a: The value of the initial investment.
b: The cumulative amount of cash flows until the nth year.
c: Cumulative cash flow of the year (n+1) minus the cumulative year n

Overall, all data is obtained by the triangulation method to produce a design of a small business management model based on organic plantation products.

DISCUSSION

Operation Aspects

1. Operation System

The study of the operating system is based on the flow of operating activities from upstream to downstream, including the study of suppliers, inputs, transformation processes, outputs, and distribution.

a. Suppliers

Suppliers to organic farm-based businesses are suppliers of seeds for fruit orchards, especially papaya, chili, and eggplant. All of these seeds are purchased from Hortimart at a base price or a special price. This price was obtained because the business actor has partnered with Hortimart which supplies its crops, including processed cassava in the form of cassava tape. For other suppliers in order to meet the needs of business materials, including auxiliary raw materials in the form of spices, yeast, fuel (gas), bamboo packaging (besek), plastic, and other equipment obtained by business actors by buying from stores or traders who have subscribed so far. If the supply from the subscribed store or merchant is insufficient, then the needs can be purchased from other merchants or stores. In general, this decision can be taken because the characteristics of the required equipment requirements are not very specific, and their availability is relatively easy to obtain.

Especially for pandan leaves, since the beginning of 2026, business owners have partnered with 2 other pandan farmers in the Gunungpati area to meet the increasing demand for pandan leaves from talam cake production companies. The need for these additional pandan leaves ranges from 10% to 20% of the total pandan leaf needs that must be supplied to the talam cake business actors.

For fertilizer needs, because agricultural land is managed on the principle of organic farming, manure is produced by business owners from goat farms. Manure needs can be met by themselves so they do not need a supplier. Likewise, the need for feed for cattle and goats all comes from their own business, namely elephant grass planted on the sidelines of agricultural land and also cassava tree stems that are destroyed with special machines (*choppers*).

b. Feedback

All the main raw material and auxiliary material needs are managed in stock according to their respective characteristics. Their needs are relatively always available because the partnership mechanisms that have been built with suppliers are maintained. Needs regarding the amount, type, and time have been scheduled so that they can always be met.

The storage facility for all the main and supporting raw material needs is available in the form of wooden cupboards and warehouses positioned relatively close to the agricultural and production areas, so that they can be provided in a relatively short time.

c. Transformation Process

The transformation process for agricultural land management uses organic fertilizers derived from goat manure owned by business actors. The process of making manure is carried out at the front of the farmland and the results are stored in a closed area so that it can reduce air pollution (aroma) and the distribution of use to agricultural areas can be done faster. The application of fertilizers is generally carried out at the beginning of the process, before the land is planted.

For agricultural land cultivation, planting areas are grouped for each type of crop. Cassava trees and pandanes are the most widely used main commodities, while other crops are relatively few and some of them are planted in the gaps of the area for land use. Planting is carried out on a scheduled and rotating basis, to ensure the availability of continuous and always maintained crops.

For watering care of cassava plants, trees are relatively not necessary, because the type of plant is hardy and does not require a lot of water. Watering is done only in summer once a month. Meanwhile, other plants, namely pandan, chili, eggplant, and papaya, are watered for about 2 days to a week once, depending on the season and weather. Another maintenance is the clearing of the land from garbage and/or weeds which is carried out once a week, scheduled in turns for each area.

Post-harvest management for all crops whose characteristics have a very short shelf life, are grouped into two, namely:

1) Unprocessed crops are cleaned and distributed to consumers directly at the location of the outlet in front of the agricultural land directly adjacent to the main road of the village, as well as using transportation media. For goat livestock, direct sales to consumers are ahead of Eid al-Adha.

2) The harvest processed by the owner is in the form of tree cassava which is processed into cassava tape and pandan leaves which are processed by washing, drying, and cut to a certain size according to the pattern to be distributed to the *talam* cake producer (as a base). For cow's milk, milking is carried out once a day and then boiled, cooled, packaged in plastic, and stored in the refrigerator to be sold directly to customers or through outlets.

d. Exodus

The output or products produced by this organic farming business are agricultural products in the form of tree cassava with butter and *rengganis*, cassava leaves, eggplant, chili, papaya, pandan leaves, cow's milk, and goats. Some of these products are sold immediately after harvest, some are obtained first, and there are also types of both. For the harvested cassava that is directly sold directly to cassava crackers producers who buy at the location of agricultural land according to the agreement. Harvesting is carried out once every 2 weeks with a rotating planting time scheduling system.

In addition, sales are also carried out directly at outlets owned by business actors, as well as through Hortimart and Istana Buah distributors with a consignment system and an average return of around 10%. The handling for this return is further sold at a price of about 20% of the normal price (depending on the conditions), but some are also used as animal feed. For animal feed, the cutting process was previously carried out with a chopper machine. The average harvest of cassava every month is around 1.6 to 1.8 tons.

Likewise, California papaya is also sold directly through its outlets and also Hortimart and Istana Buah with the same system. The average monthly harvest is about 500 kilograms. For papaya, the average harvest time is 2 times a month with a rotating planting system in each part of the land, as well as a rotational planting system with chili peppers and eggplants. Harvesting is carried out once a month with an average total per month of 25 kilograms for chili and eggplant 80 kilograms. Cassava leaves are an additional crop purchased by Padang restaurant entrepreneurs with an average sales of around 200 bunches (8 quintals) every month. Pandan leaves processed with special shapes and sizes to be sold to talam cake producers as much as 2.1 tons on average per month. Of this amount, 20% is supplied from other farmers who have become business partners.

For cow's milk that has been boiled and stored in the refrigerator, it is sold in packages per liter in plastic with an average monthly production of 450 liters. Meanwhile, goats are sold whole for sacrificial animals every Eid al-Adha as many as 5 heads per year.

e. Distribution

The distribution of processed and unprocessed crops is carried out directly at agricultural locations and at WarungKeboen outlets owned by business actors. Consumers and customers who buy in this place are end consumers and processing entrepreneurs. Thus the distribution cost is completely the burden of the buyer, as well as if there is a buyer who wants delivery by courier or package delivery service to fully the distribution cost becomes the burden of the buyer.

Sales through Hortimart and Istana Buah distributors are carried out once a week with shipping costs being the burden of business actors. Likewise, for the delivery of pandan leaves to talam cake producers, the shipping cost is the burden of the business owner. The delivery of pandan leaves is carried out 3 times in one week.

2. Product Development

The context of product development in this case is business development which includes products and their management systems. This development stage uses five stages of development, namely:

a. Idea search

The source of the development idea comes from the conditions in the area around agricultural land and where business actors live. The condition of people who have agricultural businesses such as cassava trees and other types of tubers as well as fruits, especially some types and papayas. The majority of the harvest obtained is sold directly to end consumers, middlemen, and criping producers (for cassava trees and bananas) located around Kandri village. The relatively low selling value of crops is the cause of the performance of their agricultural business cannot develop. Training efforts and various assistance from various government and private agencies for business development did not achieve sustainability and only lasted no more than one year. The attitude and motivation of business actors who tend to be passive are more oriented towards achieving results in a relatively short time. In addition, the administrators of the Kandri tourism village organization each have their main job personally, so they cannot optimally develop an organization that is able to facilitate the business development needs of farmers.

From this situation, business owners have the idea to facilitate the follow-up of the harvest of organic agricultural land owners to be sold directly to consumers or processed first. This idea emerged at the end of 2025 when there was a citizens' meeting. This facilitation is in the form of outlets with 2 alternatives owned and managed by business owners in the front of their farmland, as well as a second alternative managed by and owned by the Kandri tourism village organization located in the Omah Pintar Petani (OPP) building area.

b. Selection of ideas

The selection of ideas from 2 outlet alternatives uses marketing, operational, and financial criteria. For alternative 1) from the marketing criteria with outlets located in front of agricultural land directly adjacent to the main road edge of the village. This area is strategic and easily accessible, so the market potential is quite large. In addition, business owners also already have a market network and distribution, so that they can increase their market potential. Alternative 2) basically for marketing criteria also has the same study, because the location of the OPP is also on the side of the main road of the village. In addition, the use of the OPP area for other events is also relatively frequent, so that it can increase the additional market potential at these events because it is attended by many participants and enthusiasts.

Operating criteria for alternatives 1) For building facilities, there is already an initial building that has been used by the owner for warehouses and production processes. Machinery and equipment facilities have also been provided such as stoves, refrigerators, and complete cooking utensils. What is needed is additional outlet buildings and facilities in the form of containers for displaying the crops sold. Operating hours are relatively flexible and can empower employees who have been freelancers to cut pandan leaves. For the alternative 2) all necessary facilities should be provided from the start, especially the building and the aqueducts including their disposal. Machinery, equipment, and cooking equipment must also be invested new because operating hours are limited to 17.30. This provision which limits the previously owned independent business cannot be carried out because the facility is located at the OPP location.

For alternative financial criteria: 1) the additional investment costs are relatively less because most of the production facilities are already owned by business actors. For crops that are deposited at the outlet with a consignment system with a storage fee of 10% of the selling price as a profit for the outlet owner. While alternative 2) Greater investment costs are needed because all facilities, both building and production, must be provided. In addition, there is still a rental fee for the use of OPP land even though the value is relatively small.

From the selection process of this idea, it was determined that alternative 1) namely building an outlet in the business owner's area is an option because it has a more feasible study compared to alternative 2) namely an outlet in the OPP area.

c. Initial plan

The initial design of business development by opening this outlet began at the end of February with the addition of 1 part of the building on top of the existing production building and warehouse. Because the building and container facilities for the display are still limited, the owner partnered with 2 farmers to distribute crops in the form of bananas, papayas, and tubers.

d. Design testing

Design testing uses 2 aspects, namely internal for smooth operation and external, namely input from the market (consumers). The operating system from upstream (suppliers) to downstream (consumers) includes the management of resources (raw materials, labor, and production facilities), production processes, and finished products, both processed crops and direct sales, all of which can take place with adequate planning and control. This is measured by the process time cycle of each stage and overall which is faster, compared to the conditions when it is still carried out in the business owner's private house or the 2nd alternative, namely at the OPP. The handling of irregularities in the production process and finished products is also relatively faster due to the integrated location of the outlets.

While external testing is a study of consumer input, in general consumers and customers provide positive feedback. With outlets that are strategically located, they can more easily reach the location. In addition, if delivery by courier or package delivery service is needed, it is also easier because of the strategic location of the integrated outlet. The variety of agricultural land crops is also more, so as to provide choices that suit consumer needs. This is because business owners become distributors of other crops such as bananas and various tubers and fruits other than papaya according to the season from other farmers. The proximity of the integrated outlet location to the mosque which is only about 50 meters away makes it easier for consumers to worship and after completion can continue their shopping needs at the outlet location.

e. Evaluation

Based on the results of the design test, the business owner evaluates the feasibility of developing an integrated outlet business more complete and extensive than the available land. In addition, products will also be developed more diverse for processed products such as fried foods and stews/steamed whose raw materials come from their crops and from the owners of organic farms around them who are partners.

Financially, business development with integrated outlets meets the eligibility criteria with an NPV of IDR 119,379,566,-. And the payback period is 20 months. The details of this financial feasibility are explained more fully in the analysis of financial aspects.

f. Realization

The results of the evaluation were then realized to be developed into a larger integrated outlet with a more complete production area and facilities, as well as a more adequate customer service area. The additional building uses teak wood and mahogany as well as shelves and containers to present products. Production facilities, both machinery and equipment, mostly use production facilities that have been owned. In addition, it is also realized with adequate parking areas and complete sanitation facilities. This integrated outlet is given the identity of Warung Keboen and the construction of the expansion will begin in April 2026 with the plan to start operating in early June 2026.

Marketing Aspect

The study of marketing aspects using the concept of marketing mix includes, product, price, distribution (location), and promotions as follows.

1. Products

The study of the product, technically, has been explained in the analysis of the operational aspects of the operating system, especially the output. In general, the products produced consist of 2 types, namely unprocessed crops such as cassava, papaya, chili, cassava leaves, and eggplant as well as goat livestock products specifically for the benefit of Eid al-Adha. Other types of products are processed crops such as cassava tape, cow's milk, and pandan leaves that have been cut to a special size for the *talam* cake base. For tapes packaged with *besek* (bamboo container) and tinwall packaging according to consumer demands, while cow's milk is packaged with plastic packaging per liter. Pandan leaves with binding units according to the provisions of the *talam* cake manufacturer who has been partnering so far.

For (raw) harvested products, with the existence of the integrated outlet Warung Keboen, the types of products become more diverse because there is a supply from organic farmers around the business environment who partner with additional harvested products in the form of bananas (various types), potatoes, taro, sweet potatoes (various types), *gadung*, papaya, and other fruits according to the season. The unit of this product is per kilogram. The characteristics of this crop are generally the same, because they are processed with the same seeds and organically cultivated land (manure). The planting, irrigation, maintenance, and harvest period have become the culture of local farmers so far. In addition, with the existence of an integrated outlet at Warung Keboen that allows buyers to enjoy products, the variety of products is supplemented with various fried foods and stews/steamed with the raw materials of these agricultural products, namely bananas, cassava, and tubers.

2. Pricing

The price determined is basically not absolute on one type of price, so the average can be determined. This price is determined based on consideration of maintenance needs (fertilizer, labor, land care, transportation, and plant growth time). The average price is determined in kilograms, for cassava Rp 1,700, papaya Rp 7,000, potatoes Rp 10,000,-, chili peppers Rp 6,000,-, eggplant Rp 6,000,-, cassava leaves Rp 5,000,-, sweet potatoes Rp 5,000,-, taro Rp 7,000,-. Horned bananas are IDR 10,000 per 3 pieces, kepok bananas, king, and milk are IDR 17,000 per comb, cow's milk is IDR 10,000 per liter, tape is IDR 11,000 per package, and pandan leaves are IDR 8,000 per kilogram. All of these prices apply to consumers, both customers and non-customers. For large purchases, in general, you get a discount of around 20%. The average price of sacrificial goats is IDR 2,000,000 per head.

For delivery to partners, namely Hortimart, Istana Buah, and talam cake manufacturers, the price includes shipping transportation costs. As for other consumers who buy by courier order or come directly to Warung Keboen's integrated outlet, the price does not include transportation costs, because transportation costs are the burden of buyers.

3. Distribution (*Place*)

A more complete distribution has been explained in the operating system of the distribution sub-section. In general, the distribution of all harvested products is carried out with 3 types of distribution, namely through the integrated outlet Warung Keboen. At this location, it is very possible for consumers and customers to choose their own harvested products and crops that have been processed. In addition, buyers can also visit agricultural land because the location of the land is behind the outlet, so they can harvest directly from the trees if the conditions are suitable for harvesting. Harvesting techniques are taught and assisted by land owners, so that they can be done correctly and anticipate environmental damage. For some consumers, visits to agricultural locations have product value as organic tourism based on organic agriculture education. This is because business owners always explain to the consumers who come.

The distribution of agricultural products is also carried out by delivery to buyers who have previously ordered. This distribution cost is entirely the burden of the buyer. Other distribution is carried out by a consignment system through Hortimart and Istana Buah distributors. Consumers can also buy crops from farmers at both distributors, but at a higher price. This is because there is a part of the profit that is the right of the manager of the distributing store. For consumers located around the dealership in terms of time and/or cost, it can be more efficient if buying from both dealers.

4. Promotions

Basically, business owners do not carry out specific promotional methods. Promotional efforts are limited to using the WhatsApp application (status) and networks that have been owned. From this network naturally occurs *Word of mouth* so that it can reach a wider market both in terms of the number of consumers and the location. This is because consumers and customers who buy each also have relationships because of their profession or as members of the organization of activities that are their activities that are related to many people.

Human Resource Aspect

The study of the aspect of human resources uses the motivation concept from Mc McClelland which is known as the Three Needs Theory or *The need for*. The theory is suitable for business actors because they want to succeed in their business which is also in running their business related to other parties, both consumers, customers, and other business partners. The three needs are three social needs learned from the environment and culture: the need for achievement or *The need for Achievement* (*n-Ach*), the need for power or *The Need for Power* (*n-pow*), and the need to affiliate or *Need for Affiliates* (*n-Affil*).

1. Need *for Achievement* (*n-Ach*)

This need includes the performance of the business that has been carried out so far in the perception of business actors who always strive for an increase in terms of the number of sales. In general, sales performance every month fluctuates, but the trend increases by an average of 5% every month. This improvement in business performance is an indicator of the achievements achieved by business owners. In addition to financial business performance, the need for achievement is also measured from the feedback of consumers, customers, and business partners. The satisfaction of consumers felt by business owners is their positive response to the quality of not only agricultural products, but also the services provided, including sharing knowledge with consumers in managing organic agricultural land. Likewise, feedback from partners, both distributors, and suppliers to exchange opinions in the context of business development and improving the quality of products and services.

Another indicator for the need for achievement perceived by business owners is the courage to take risks. Business and product development by opening an integrated outlet of Warung Keboen Sepnuh uses the owner's capital, for the construction of stalls including sanitation facilities, complete production facilities, and adding diversity of raw and processed agricultural products. The courage to bear this risk is carried out by calculations based on the experience of running a business, both the ability to observe market potential, working capital turnover patterns, interaction with supplier partners and distributors, to the risk of crop failure due to pest attacks that have been experienced for papaya plants.

The sense of responsibility is also a reflection of the need for achievement perceived by business owners to handle returns from crops that do not sell well at Hortimart and Istana Buah merchant outlets. The determination of returns is based on the maximum shelf life where the crop is still suitable for processing and consumption. For the return of cassava, the tree is then ground using a chopper to be used as cattle feed and for papaya it is used as an additional ingredient for chili sauce producers.

2. *Need for Power* (*n-Pow*)

The study of motivation to meet the need for power is reflected in the development of the Warung Keboen integrated outlet business located in the front of its agricultural land compared to renting in the Omah Pintar Petani (OPP) area. With the location of an integrated outlet in his land area, the owner can fully manage the operating system with management that suits his characteristics and experience in running an organic farming business. The management of freelance workers who work to clean and cut pandan leaves, determination of crop specifications and criteria, land management methods for farmer partners who entrust their crops for sale, tape production schedules, order services, and financial management are all based on the owner's policies and regulations.

If an integrated outlet is established at the OPP location, in addition to having an allocation of land rental costs, there must also be a limit on operating hours and the involvement of OPP management to manage the outlet. Although integrated outlets aim to facilitate and become a means of marketing the harvest of farmer partners, if there is managerial involvement of other parties, business owners are not free to realize and implement management skills to realize the goal of improving business performance and community welfare, especially farmer partners and local residents.

3. ***Need for Affiliation*** **(*n-Affil*)**

The need for affiliation as a business actor is reflected in the establishment of the Warung Keboen integrated outlet to involve many people by interacting with them to improve their business performance and also the welfare of residents, both farmer partners and workers. By involving residents as permanent workers to manage agricultural land, as well as freelancers to help the harvest process in large quantities, socially it becomes a satisfaction because it can help improve the welfare of others. Likewise, residents who become freelance employees to cut pandan leaves. They are empowered so that their welfare also increases because they earn income. The existence of workers who do work at the outlet location creates an increasingly lively atmosphere of the outlet and can be a magnet for potential consumers to see directly in post-harvest production activities.

In addition, affiliation with farmer partners who are also local residents to supply the needs of pandan leaves is also an indicator of the fulfillment of the need for affiliates as motivation in running a business. Other farmers who are also local residents are producers of bananas, papayas, various fruits according to the season, potatoes, and various tubers, as well as parties affiliated with business owners as partners. With the facilitation of the Warung Keboen integrated outlet, it can be a means to market the crops of farmer partners who have only been able to cultivate agricultural land but do not have a marketing network. This form of affiliation can improve the welfare of citizens economically.

Affiliations with Hortimart distributing merchant partners, Istana Buah, and talam cake manufacturers are affiliates that can improve the managerial management knowledge of the owner's business. Thus reciprocal relationships in various affiliations become a systemic social environment to increase knowledge of joint business management, improve business performance, improve common economic welfare, and sustainable social relations.

Financial Aspect

The study of the financial aspect is used to assess the feasibility of Warung Keboen's integrated business, by using *Net Present Value* (NPV) and *Return Period* (PP). In calculations with the NPV method, the discount rate applied is 7% per year (with a conversion of 0.0058 per month). The assumption is that the discount rate of capital needs for businesses if invested in bonds will get a return rate of 7%, besides that bonds are investments with the lowest level of risk. Based on the conditions so far carried out by business actors, the risk level is relatively low. Crop failure conditions are relatively rare, as the plant type does not require detailed care and is generally a naturally strong plant type. In addition, the market goals that have been established in business partnerships have been going on for a long time with repeated purchases of both end consumers, distributors, and processing businesses. For distributing traders, it uses a consignment system with an average return of 10%. Meanwhile, Warung Keboen's integrated business also uses a consignment system for farmer partners who entrust their crops to sell.

This business owner does not have an adequate financial recording system and habits for both incoming and outgoing cash. The method used is mostly based only on memory and short-term accounts receivable records using a scrap application on a mobile phone and photo documentation stored in the gallery menu. All of these forms of records are often deleted or deliberately deleted when the memory is full and the debt is completed.

In the calculation of the feasibility of Warung Keboen's integrated business, it uses a unit of time every month with cost and sales data for the last 6 (six) months, with a forecast for the next 3 years (36 months) to assess the feasibility of the investment. Both cost and sales data are guided by the lowest and highest data ranges for the first 12 months forecast. For the cost of using the highest data, it is optimistic and in the second year the increase is guided by an inflation rate of 4%, while for the third year inflation is 5%. Except for direct labor costs (wages), the burden will increase by 5% starting from the third year. Meanwhile, sales data uses the lowest (pessimistic) data, where a 5% increase in selling prices is only applied in the third year as a form of adjustment to the increase in costs. Details of costs and sales estimates for the 6 months prior to the base year, as well as cost increases and sales forecasts for the next 36 months are in the appendix. The base year used to assess the feasibility of the investment is set to start in early June 2026.

Table 1 shows that the investment in the organic farming business development model with the integrated outlet Warung Keboen is feasible. This is shown by the current positive investment value for 3 years (36 months) of IDR 119,379,566,-. Meanwhile, judging from the relatively fast rate of return on investment, within 20 months the investment has returned. For the record, although every year it still earns profits, the tendency of profit is decreasing. Although the price aspect is sensitive for consumers of organic agricultural products, periodic price increases need to be considered in order to obtain profits that can be used for re-investment and further business development.

Table 1. Recapitulation of NPV and PP Calculation Results

No	Details		Amount per month		
			Year 1	Year 2 (Inflation 4%)	Year 3 (Inflation 5%)
1	Investment Value	187.040.000			
2	Sales (price adjustment for year 3 with a 5% increase from year 2 price)		32.740.000	32.740.000	34.377.000
3	Cost				
a	Product cost		1.853.000	1.927.120	2.025.000
b	Direct labor costs (adjustments/increases in the 3rd year)		13.000.000	13.000.000	14.500.000
c	Overhead costs		490.000	509.600	535.000
4	HPP (3a+b+c)		15.343.000	15.436.720	17.060.000
5	Gross profit (2-4)		17.397.000	17.303.280	17.317.000
6	Other operational costs		7.600.000	7.904.000	8.300.000
7	Profit (5-6)		9.797.000	9.399.280	9.017.000
8	Personal prive		7.500.000	7.500.000	7.500.000
9	Earnings withheld per month (7-8)		2.297.000	1.899.280	1.517.000

Discount rates	7% per annum (0.58 per month) → assumption for bonds
NPV = $\frac{R_t}{(1+i)^t}$	119.379.566
Return Period = n + (a – b) / c × 1 year	19.39 months (Rounded up to 20 months)

Source: primary data, 2026 (processed)

CONCLUSION

Based on the results of the analysis, the management model of organic farming is to use an integrated outlet that is the center of organic agricultural land management that minimizes waste and residual sales results and the rest of the processing process. This organic farming management model has implemented a circular economy system with optimal utilization of all produce and production residues to be reused in land management and processing processes with waste utilization. Manure as the basis of organic agriculture produced from cattle and goat farm waste is a form of organic agricultural management, in addition to not using pesticides.

The integrated outlet model given the identity of Warung Keboen in a strategic location, becomes a center for distributing the harvest of farmer partners who have limitations in marketing due to access constraints and market networks. Thus, real harvests can improve the financial performance of farmer partners. Diverse crop products are a decision that is able to synergize most of the agricultural products from owners and farmer partners that complement each other and there is no competition for similar products.

With a study of all aspects of management, both operations, marketing, human resources, and finance, it shows that the investment in the organic farming small business management model in Kandri village with the integrated outlet Warung Keboen is considered feasible with *a positive NPV* method of IDR 119,379,566,- and the return on investment with the *Payback Period* method is achieved within 20 months.

Based on the results of data analysis, some of the suggestions submitted in this study are as follows

a) The absence of well-documented financial recording of cash in and out will make it difficult to measure business performance from the organic farming business management model of Warung Keboen integrated outlets for the next time. Likewise, the depreciation cost burden is still not understood by business managers. It is recommended that managers record all cash flows with a simple application

b) Partner farmers' understanding of the quality of crops that do not always match market demand will increase the impact of the return of the crop, as an implication of the consignment system. Although the return can be processed into animal feed, the economic value is lower. Therefore, it is also better for partner farmers to be periodically scheduled to be involved in the transaction process with consumers, in order to understand the concept of product quality that must be implemented in the process of cultivating their agricultural land

c) The need for community service activities that accommodate the suggestions a) and b0 is the first step so that the concept of development can be understood first accompanied by assistance, so that later outlet managers and partner farmers can independently carry out further.

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