

BUSINESS MODEL INNOVATION OF INDONESIAN INTEGRATED WOOD DEPOT FOR FURNITURE INDUSTRY

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Abstract: The wood-based industry is faced with various problems, both internal and external, especially the problem of availability and continuity of raw materials. The study aims to analyse the business model that has been implemented by this wood depot. Then, this study also analyses the feasibility based on the business model innovation of this wood depot initiative. This research uses an analytical framework of the Business Model Canvas (BMC) and Financial Feasibility Canvas (FFC). The Business Model Canvas presents a visual representation of the nine components of a business which are divided into the right (creative side) and left (logic side) on one page. The analysis uses the Financial Feasibility Canvas (FFC) which consists of 6 steps of analysis components consisting of rational investment, capital investments, assumptions, cash flows, financial returns, and decisions. The results of this study show that this business model innovation at this integrated wood depot can strengthen the speed of supply of raw materials and can maintain continuity to the furniture industry. The sustainability of this business model innovation is realized through vertical integration into the furniture industry. Based on the feasibility analysis, this business model has a feasibility in terms of investment for 5 years. In the future, the wood depot in this business model can be applied to industry players in Indonesia.

Keywords: wood depot, financial feasibility canvas, wood-based industry, business model innovation, business strategy

Abstrak: Industri hasil hutan dihadapkan berbagai permasalahan baik internal maupun internal khususnya masalah ketersediaan & kontinuitas bahan baku. Penelitian ini bertujuan untuk menganalisis model bisnis yang telah diterapkan oleh depot kayu ini. Kemudian, penelitian ini juga menganalisis kelayakan berdasarkan inovasi model bisnis dari inisiatif depot kayu ini. Penelitian ini melalui kerangka analisis Business Model Canvas (BMC) dan Financial Feasibility canvas (FFC). Business Model Canvas yang menyajikan gambaran visual dari sembilan komponen sebuah bisnis yang dibagi menjadi kanan (sisi kreatif) dan kiri (sisi logika) dalam satu halaman. Analisis menggunakan Financial Feasibility Canvas (FFC) yang terdiri dari 6 langkah komponen analisis yang terdiri dari alasan investasi, investasi modal, asumsi, arus kas, pengembalian finansial, dan keputusan. Hasil dari penelitian ini menunjukkan inovasi model bisnis ini pada depo kayu terintegrasi ini mampu memperkuat kecepatan terhadap penyediaan bahan baku dan dapat menjaga kontinuitas kepada industri furniture. Keberlanjutan inovasi model bisnis ini diwujudkan melalui integrasi vertikal kepada industri furniture. Berdasarkan analisis kelayakan model bisnis ini memiliki kelayakan dalam sisi investasi selama 5 tahun. Kedepan depo kayu pada model bisnis ini dapat diterapkan kepada para pelaku industri di Indonesia.

Kata kunci: depo kayu, financial feasibility canvas, industri Hasil Hutan, inovasi model bisnis, strategi bisnis

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INTRODUCTION

The wood-based industry has long been one of the pillars of the Indonesian economy. The wood-based industry has a long history of contributing to the economy, both through foreign exchange and creating job opportunities. The history of the forest product industry began with the use of forest wood in the early 1970s through a wood processing development program. In the 1990s, Indonesia succeeded in controlling the export market of the tropical timber industry in the world. After that, as the production of natural forest wood (HA) continued to decline, Indonesia was no longer a major player in the world market. During the economic crisis from 1999 to 2000, the forest product industry was at its lowest point, many wood processing companies went bankrupt.

The furniture industry has also shown quite encouraging developments. Although this industry is still concentrated on the island of Java, recent developments show that this industry is also spreading, although it is still relatively small, in various islands, both in Sumatra (Aceh, North Sumatra and South Sumatra), Kalimantan, Sulawesi (West Sulawesi and Sulawesi). Central), Bali, Nusa Tenggara and Papua. The Ministry of Industry (2020) informed that the furniture industry contributed to exports of 1.95 billion USD or contributed 1.5% of the total export value of the non-oil and gas processing industry in 2019. However, in recent years, the number of companies has fluctuated with tendency to decrease. In general, the forest products industry has developed quite well, but in fact this industry is still faced with various problems both internally and internally, namely: the problem of availability and continuity of raw materials, low productivity of machinery/equipment, low productivity of human resources, increasing global competition that is increasingly competitive. strict, high-cost economy and dependence on imports of auxiliary raw materials. In fact, the various problems faced by the forest product industry, the resolution of the problem of availability and continuity of raw materials is considered by stakeholders as the most priority and urgent problem to be resolved and a solution is sought. Thus, it is important to map the supply (availability) and demand for raw materials in each industry, both in terms of volume and type of wood needed. The government has made various breakthroughs to provide convenience to business actors in carrying out their production by

building Integrated Timber Terminals (TKT) in several regions in Indonesia. But in fact, it is still not optimal in the implementation process to date.

This optimization of strengthening the availability of raw materials makes furniture industry players take the initiative in creating integration between the supply of wood raw materials and the furniture production industry through wood depots. This wood depot is an institution owned by industry players to play a role in providing raw materials that can be used directly by the furniture industry in the production process. Initiatives from industry players are expected to be able to get support from the central and regional governments so that they can run in a sustainable manner and can be developed nationally. In addition, it is also necessary to have the right business pattern so that the wood depot can support the alignment of many players in the furniture industry so that they can develop in the future. Therefore, it is important for business depots to have a business model that implements sustainable business practices.

Sustainable business practice is a paradigm in business activities that can have a positive impact on life in the future. It is considered that sustainable business practices can affect the economic, social, and environmental dimensions (Freeman and Hasnaoui, 2011). The concept of sustainability within the company has also undergone many developments according to the company's vision and mission and the dynamics of society as a market that they must fulfil. The application of the concept of sustainability within a company is generally implemented and developed through the practice of Corporate Social Responsibility (CSR) (Smith, 2013). However, the concept of sustainability through CSR practices has been debated by experts and researchers in implementing, maintaining, improving, and evaluating steps and results within companies (Mahoney et al. 2013). Therefore, new approaches to sustainable business practices are being developed by many companies. The development of sustainable business practices in companies is widely applied through the integration of sustainability principles in corporate strategic planning (Porter and Kramer, 2006), creating market opportunities, implementing new ways of using and reusing resources, integrating different stakeholder approaches (Asif et al. 2013), and generate value and share it or create shared value (Porter and Kramer, 2011).

The integration of sustainability principles into the company's strategic planning to implement sustainable business practices can be developed through the company's business model. The business model is a corporate theory for research on sustainability transitions, and helps to drive understanding of the micro foundations of socio-technical change (Sarasini and Linder, 2017). Business model Innovation has suggested helping to change sociotechnical rules by encouraging increased innovation and reconfiguration; on the other hand, it can hinder the process of change by strengthening the regime's power (Bidmon and Knab 2018). The relationship between business model innovation and sustainability principles to implement sustainable business practices within companies has also been published from various research on sustainable business model innovation (Boons and Luedeke-Freund, 2013; van Kleef and Roome, 2007). Wirtz (2011) classifies business model innovation into 3 groups. First, the business model group that focuses on technology. This category of model innovation is the development of business models by capitalizing on new technologies in business practices such as internet-based products and services. Second, the business model developed with a focus on the organization of the company. Business model innovation in this focus enables business models as development tools for business systems and architectures to represent, plan and structure businesses with an emphasis on organizational efficiency. Third, the class of business models used as a step to determine the company's strategic orientation. This group uses the business model to face market competition by prioritizing efficiency. Accuracy in creating and delivering value to customers is at the core of business model innovation in this group. The research that has been done analyses the differences in business model behaviour between newcomer companies and old companies (Ruggiero et al. 2021). Radical or incremental nature of Business Model Innovation, The incremental innovation business model involves continuous improvement without any major changes, both in internal competence and external partner relations, whereas the radical innovation model involves new types of offerings and the design of existing characteristics and stakeholder networks (Pedersen, Gwozdz, and Hvass 2018).

The innovation of sustainable business models has different interpretations and depends on socio-economic conditions in the company's external environment in meeting the market. In this research, the business model

innovation is carried out in the wood depot initiative in Indonesia. The development of trends and directions for the sustainability of the forest-based sector has become a concept of sustainable business model innovation in supporting the integration of upstream to downstream of the furniture industry in Indonesia. The existence of this new wood depot initiative needs to be researched to become a reference to stakeholders in order to form a new wood depot initiative or develop it nationally. There is a business model innovation in this wood depot initiative, so this study aims to analyses the business model that has been implemented by this wood depot. Then, this study also analyses the feasibility based on the business model innovation of this wood depot initiative.

METHODS

This research was conducted from July to November 2020. The object of this research is a wood depot company in Indonesia. The method used in this study is a case study approach on an integrated wood depot initiative in Indonesia. The data used in this study are primary data and secondary data. The primary data used comes from the implementation of Focus Group Discussions and surveys in companies. Secondary data is through journals, books, and company reports. The implementation of Focus group discussions is carried out at the current top management, middle-management, and corporate partners levels.

This research uses an analytical framework of the Business Model Canvas (BMC) and Financial Feasibility Canvas (FFC). The Business Model Canvas is a logical picture of how an organization creates, delivers, and captures value (Osterwalder, 2010). The Business Model Canvas, which presents a visual description of the nine components of a business on one page, acts as a scorecard or scorecard. The nine components are divided into right (creative side) and left (logic side). The nine components of the Business Model Canvas consist of Value Propositions, Customer segments, Channels, Customer Relationships, Revenue streams, key resources, key activities, key partners, and cost structures. Then, the business model innovation in this wood depot can be said to be feasible based on this research, then an analysis is carried out using the Financial Feasibility Canvas (FFC) which consists of 6 steps of analysis components consisting of investment reasons, capital investment, assumptions, cash flow,

financial returns, and decisions. This step is to follow the logical financial consequences to the calculation of financial returns to help the entrepreneur's decision-making process (Keerativutisest & Promsiri, 2021).

The analysis of business model innovation in this study will show the level of feasibility that exists in the business model innovations that have been carried out by the wood depot. The business model can be said to be feasible if the indicators of NPV, IRR, Payback Period, and Profitability Index have been met. Based on the methods and approaches used in this study, the framework for this study is shown in Figure 1.

RESULTS

The Business Model Innovation

The analysis of the canvas business model at the wood depot is analysed based on 9 elements of the canvas business model consisting of elements of value proposition, customer segments, channels, customers relationships, revenue stream, key resources, key activities, key partnerships, and cost structures. Based on the current condition of BMC at the wood depot, it shows that the current business model is managed in an integrated manner and is run based on the request of partner companies. There are business model innovations in this wood depot as follows:

Value Propositions

This wood depot focuses on offering ready-to-use wood for the furniture industry. Ready-to-use wood in question is wood that can be directly used as raw material for making furniture. Depo Kayu offers ready-to-use wood products by maintaining and improving the quality of wood that is ready to be used as raw material for making furniture. The raw materials prepared by the wood depot are standardized raw materials based on customer needs. Consistency in maintaining the quality of ready-to-use wood is one of the value propositions in this business. Another value proposition offered by this wood depot is the availability of ready-to-use wood which will maintain the certainty of wood supply for its customers. This availability also strengthens the competitiveness of the wood processing industry in terms of production speed for the furniture industry.

Based on the value proposition offered by this wood depot, it shows that its business model is a product-oriented business. Product-oriented manufacturers are geared towards product innovation, and they generally lack experience in service innovation (Coreynen et. al, 2017). Product innovation, which is usually carried out by companies with a product-oriented business model, is carried out by investing in supporting infrastructure to maintain and improve products. However, the company can still provide minimal service by knowing the wants and needs of customers.

Customer Segments

Wood depots with existing value propositions segment customers by vertical integration with wood furniture manufacturers. This is because the depot has customers who only fulfil the wishes of partner companies that have an agreement for the need for ready-to-use wood based on their wishes in terms of type, quantity, and quality. The B2B decision-making process tends to be more complex than in the B2C marketplace. They involve more people, are more formal, and involve buyers, who have extensive knowledge of the products and services they are buying. In addition, customers tend to rely less and more on personal contact (Leek & Christodoulides, 2011).

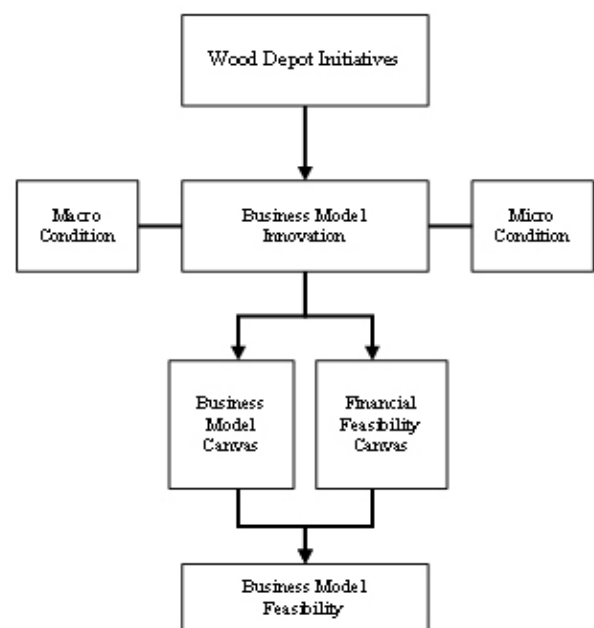


Figure 1. Research framework

Channels

Wood depot as a product-oriented company, provides channels to customers through the website and word of mouth as part of providing access to its customers who want to buy ready-made wood through a partnership pattern. This is because it makes it easier for the wood depot to prepare the raw materials desired by its partners. Web-based marketing systems and smartphone applications offer reliable and convenient internet access (Want, 2009). Therefore, in the future it is necessary to develop channels to sell wood more easily. The research that has been done is that there are several online channel developments that can be done by wood depots, including the auction feature and the negotiation feature for the furniture industry (Mukhtar et al. 2009).

Customer Relationships

Wood depot partnership program through vertical integration agreements with customers. This is because this wood depot is an integrated company and is run as part of supporting raw materials for its partner furniture industry. Integration is advantageous because it allows customers to avoid paying the markup occasionally, but it is not profitable because it discourages investment in cost reductions by independent suppliers (Loertscher & Riordan, 2019). However, the wood depot currently has a passive service to provide convenience for customers outside of its partners to communicate via email and telephone services. The concept of the relationship carried out by this wood depot is still conventional. This is because the target market does not have strong competition with wood depots.

Key Resources

Timber depots have the key resources of technology to process cut wood into ready-to-use wood. Therefore, based on the results of a survey conducted at the wood depot, it has a large storage warehouse to store ready-to-use wood for distribution to partners. This warehouse is also equipped with standardized drying facilities. In addition, wood cutting equipment is also a key resource owned by this company so that the wood has the size according to the plans desired by its partners. In addition, currently sales of ready-to-use wood for its partners still provide teak and mahogany types, so that teak and mahogany are currently the main

raw materials that are the main resources in this wood depot business model.

Key Activities

Wood depots have a key activity run by the company. The wood depot, which is oriented towards ready-to-use wood products, has a key activity by buying forest product wood in order to maintain the certainty of raw materials to make ready-to-use wood for furniture making. After purchasing the forest products, the wood depot does the processing by cutting it according to the needs and drying it to reduce the moisture content of this ready-to-use wood. This standardization of ready-to-use wood is also based on the request of its partners.

Key Partners

The company's product-focused timber depots are highly dependent on timber supply partners from the Social Forest Management Agency. Currently, companies are more dependent on this institution than Perhutani. In fact, the company also relies on the Social Forest Management Agency, although the distance and the price are obtained further, and it is expensive compared to partnering with Perhutani. Partnerships are carried out when companies need to collaborate formally with stakeholders to ensure the certainty of resource availability (Amaliah et al., 2019). The supply of wood raw materials needed by wood depots comes from social forests managed by the community. Social Forestry is a sustainable forest management system implemented in state forest areas or private/customary forests carried out by local communities to improve their welfare, environmental balance and socio-cultural dynamics. The government has allocated 12.7 million (2016-2019) for Social Forestry, through the scheme: Village Forest (HD) with HPHD tenure or Village Forest Management Rights; Community Forest (HKm), the permit granted is IUP HKm or Community Forest Utilization Business permit; Community Plantation Forest (HTR), the permit granted is IUPHHK-HTR or Business Permit for Utilization of Timber Forest Products-People's Plantation Forest; Customary Forests (HA), the tenure is Determination of Inclusion of Customary Forests; Forestry Partnership (KK) in the form of KULIN KK or Recognition of Protection of Forestry Partnership and IPHPS or Social Forestry Forest Utilization permit in Java Island.

The mechanics of managing and developing social forest areas used by industry are shown in Figure 2. The existence of this social forestry is managed by PERMAPSI (Association of Indonesian Social Forestry Society). PERMAPSI is an association of social forestry observers and managers who are independent, integrated, and responsible for the existence and sustainability of social forests. The existence of PERMAPSI has a vision, namely the creation of a prosperous, socially just and sustainable Indonesian social forestry community, while the mission to be carried out is (1) Improving the ability of social forestry communities in managing all livelihoods within the social forest environment, (2) Creating industrial governance equitable and sustainable social forestry. Based on the PERMAPSI, it is hoped that the forest owned by the community has economic value that can support the furniture industry, as well as social benefits for the community in the social forestry area.

Revenue Streams

Product oriented wood depots, whose income streams depend on the sale of ready-to-use wood. Currently, the revenue stream from timber sales consists of 7

partners who have a maximum requirement of 15,000 m³. Currently, the needs that partners want are not sufficient from the current total production of wood depots, but in their development the wood depots will continue to increase their production capacity to meet partner needs.

Cost Structures

Timber depots as suppliers of ready-to-use wood for partners as customers have a dominant cost structure in production and operating activities. This makes the cost structure owned is production costs consisting of materials, human resources, and overhead consisting of warehouse maintenance costs, equipment, and energy source requirements.

Business Model Feasibility Analysis

The feasibility analysis of the business model is carried out using the Financial Feasibility Canvas (FFC) which is divided into 6 steps, namely (1) investment rationale, (2) capital investment, (3) Assumptions, (4) Cash Flow, (5) Financial Returns, and (6) Entrepreneurial Decisions.

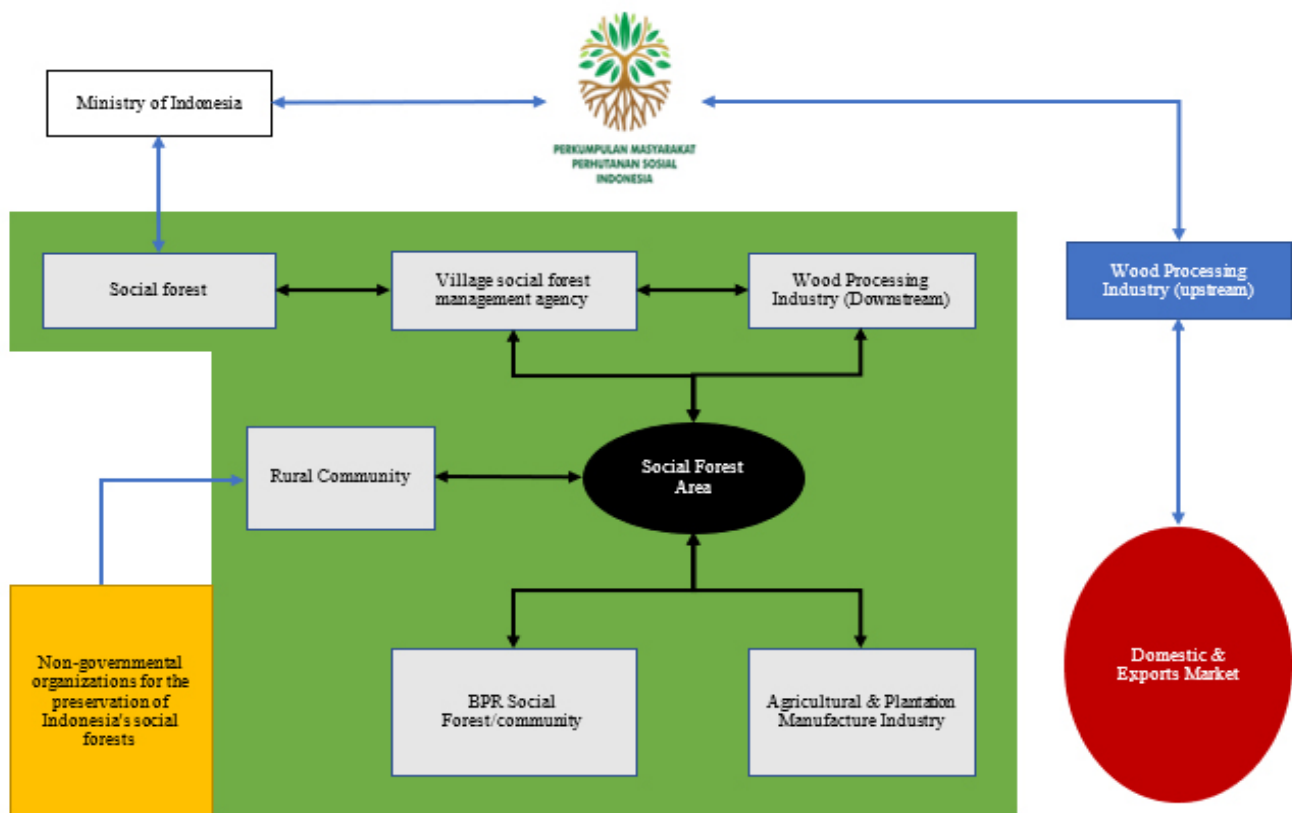


Figure 2. Social forest management and mechanism

Investment rationale

Based on the potential business model for the development of a wood raw material logistics centre for the furniture industry, it is very important to invest because it can strengthen the furniture industry in ensuring the availability and quality of raw materials used by the furniture industry. The wood depot is one of the pioneers in developing raw material depots for the furniture industry. This is because they think that the existence of this depot will facilitate the availability of raw materials and control the quality of quality raw materials, so that it is easier for consumers to get furniture faster and with guaranteed quality. If there is no wood management through this wood depot business model, then there is a comparison in Figure 3.

Based on the figure, it shows that there is an inefficiency in the business process if the wood produced by the social forest is not managed centrally. This condition shows that the time needed to get ready-to-use wood for furniture raw materials has a period of 1 month to be used by the furniture industry. However, if the management of this forest production wood is managed properly, it has the advantage of a better time to be used by the furniture industry as raw material. The existence of a wood depot by preparing ready-to-use wood raw materials, the furniture industry has an advantage for export trade. The advantages experienced by the industry include (1) producers only need 1 day to obtain

raw materials (buying time efficiency), (2) wood prices are cheaper and more stable (price certainty), (3) wood purchases will be as needed (effective), (4) Quality standards are met (competitive).

Capital Investment

In preparing for the development of a business model for a wood depot for the furniture industry, capital investment is needed from a place consisting of land and buildings, and machinery to support the processing of logs into ready-to-use wood for industry. In addition, the total costs required to run this business model consist of raw material requirements, Human Resources, and Overhead. Table 1 shows the capital for investment in running this business model.

Assumptions

The ready-to-use wood depot business model for the furniture industry is developed in stages. For 5 years, it will be developed based on the regional level covering the Solo and D.I. Yogyakarta. Marketing activities at this depot are through vertical integration in the furniture industry, which requires ready-to-use wood as raw materials. Based on the existing table, there are 7 companies that will partner to become customers of this wood depot and have potential needs for ready-to-use wood.

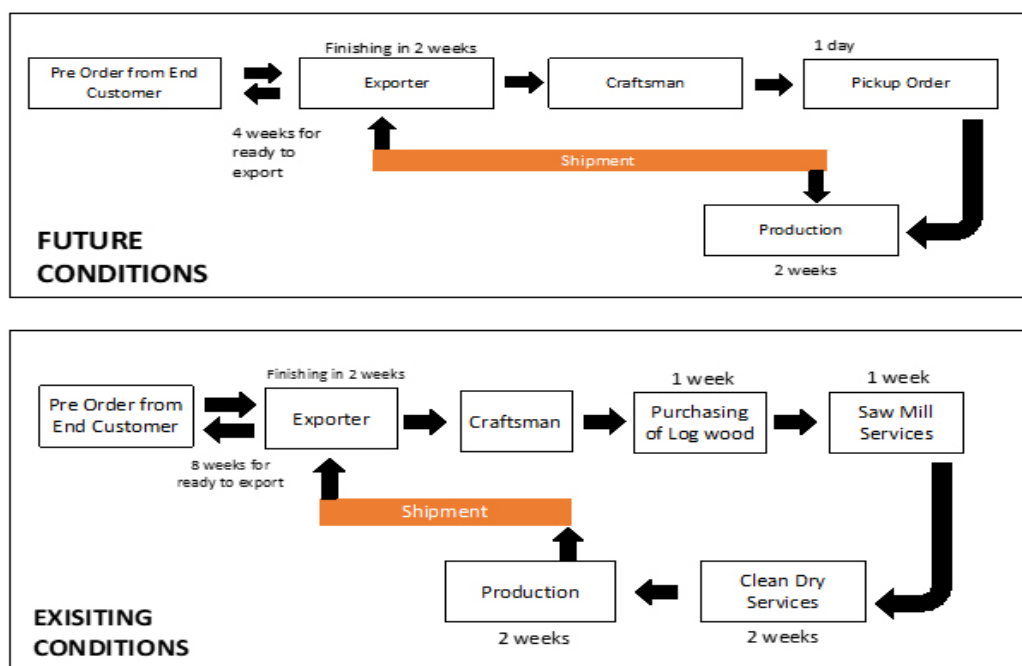


Figure 3. Advantages of implementation the innovation business model

Sales of this ready-to-use wood (Table 2) in the next 5 years are assumed to consist of teak and mahogany wood. These two woods are the dominant wood used in the Solo and D.I Yogyakarta regional areas. Based on the initial business model, it can be projected revenue (Table 3) from the production process that occurs in 4 cycles for 1 year for the sale of ready-to-use wood types of teak and mahogany.

Cash Flow

The flow of cash flow in this business model is influenced by the profit and loss from the assumption of income from sales received. This income assumption is also the net cash flow received by the company. This is reflected if for 5 years the company can maintain net cash flow, then the total cash flow received is Rp34,665,000,000. Based on the present value analysis on net cash flows

with an interest rate = 6%, it is projected to be able to reach a net cash flow value of Rp29,201,796,000. However, if the interest rate reaches 10%, the company can achieve a net cash flow of Rp26,276,070,000

Financial Returns

The feasibility analysis of this business model must also go through a valuation analysis by considering all future additional cash flows from the project and considering the level of risk and uncertainty in both operating and business aspects. One of them is the risk of financial returns in future financial investments. Assessment to determine risk is analysed using the net present value approach, Internal Rate of return, Profitability Index, and Payback Period. Based on this analysis, it can be shown in Table 4 that this business model is feasible to run and develop over a period of 5 years.

Table 1. Business model financial investment

	Investment Components	Cost	Total Cost
Total First Investment	Sites (Building and and))	Rp8,621,280,000	Rp13,871,102,000
	Machineries	Rp5,249,822,000	
Total Operational cost	Initial Working Capital (Raw Material, Human resources, Overhead) /years	Rp12,950,000,000/cycles	Rp51,800,000,000/tahun (4 cycles)

Table 2. Potential wood market in volume

Number of Company	Total Volume (m ³)
Company a	2700
Company b	864
Company c	2700
Company d	2160
Company e	2700
Company f	2160
Company g	2340

Table 3. Sales projection

Types of Wood	Volume/ Cycle (m ³)	Sales	Total Profit/Cyle	Total Cycle/years
Teak	1400	Rp8,625,000	Rp12,075,000,000	Rp48,300,000,000
Mahogany	700	Rp4,025,000	Rp2,817,500,000	Rp11,270,000,000
TOTAL			Rp14,892,500,000	Rp59,570,000,000

Table 4. Financial feasibility

Feasibility Criteria	Value	Unit
NPV	6,709,414,000	Rupiah
IRR	15.17%	Percentage
Payback Period	3.2	Years
Profitability Index	1.3	

Based on these eligibility criteria, the Net Present Value at interest rate = 6% gives a positive value, so it can be declared feasible to run. For the Internal Rate of Return, it shows the ability of the capital provided to show the benefits of the discount rate or above 6%. The payback period that can be achieved in this business is 3.2 years. This shows that the duration of the payback period is shorter than the target of 5 years, so it can be stated that it is feasible to continue. In addition, there is a profitability index that can be achieved at 1.3. This shows that the business can be profitable because the value of the analysis results is more than 1 (yuwani et. al. 2014)

Entrepreneurial Decision

The decision to become an entrepreneur is influenced by positive perceptions of desire and entrepreneurship, as well as some level of entrepreneurial self-confidence (Otache, 2021) The results of the analysis that have been carried out show that the wood depot business model for the furniture industry has benefits in supporting the furniture industry to obtain certainty of quantity and quality in furniture production. On a macro level, the speed in supporting the supply of wood raw materials is the competitiveness of the industry in exporting furniture abroad. From a financial aspect, the benefits received by the company through this business model can support economic sustainability. This is because it can deal with operational and business risks and uncertainties that will be faced by the company in the future, so that this business model can be declared feasible to be continued and developed. In addition, highlights how companies follow strategies for specific products and services to adapt or adapt or stretch and change to different regime dimensions, including market and user, user preferences, culture, industry, policy, and science and technology (Wesseling et al. 2020).

Managerial Implications

Planning the development of wood depots to meet the needs of ready-to-use wood raw materials for the furniture industry through business model innovation is very important. Business model innovation has a role to ensure that this wood depot can run desirable, feasible, and viable. In addition, the existence of a wood depot with a current business model is expected to become an institutional institution that can maintain justice for the side of small-scale furniture players, to increase the

competitiveness of the existing small industry in terms of availability of raw materials.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the analysis that has been carried out from the business model innovation of the wood depot initiative to provide wood raw materials for the furniture industry, it can be concluded that this business model has a value proposition by offering ready-to-use raw materials in a faster time than other wood depots that only provide logs. The targeted customer segmentation is the furniture industry which has agreed through a partnership pattern. The channel used is still open for the furniture industry to partner, so the wood depot has a website and word of mouth to reach other customers who want to partner. The customer relations carried out are still classified as conventional by relying on general communication with a letter of agreement approach between the wood depot and the furniture industry. This makes the wood depot's income stream comes from the sale of wood from its partners. Key activities needed to offer a value proposition in the form of drying and cutting activities on demand, as well as looking for potential partners who are interested in collaborating. This activity requires major resources in wood raw materials, equipment, and warehousing for this business to run. Meanwhile, to maintain the availability of logs, a key partner is needed in the form of joint social forestry cooperation under the auspices of PERMAPSI. The existence of cooperation and business activities from owned resources, the main cost structure comes from production costs consisting of materials, human resources, and overhead consisting of warehouse maintenance costs, equipment, and energy needs.

Feasibility Analysis in this business can also be feasible to run and even be developed for a larger scale of the industry and its market. This can be shown from the results of the Financial Feasibility Canvas (FFC) analysis which results in an investment in the presence of a wood depot in this business model which will be able to generate other advantages in terms of the speed of raw material acquisition time, certainty of cheaper and more stable prices, can be adapted to the needs of the industry from quality, and able to meet the desired

quality. In addition, from the current market assumption that consists of partners, the level of investment in wood depots can have a positive NPV. The IRR value also gets a value of 15.17%, which means it can exceed the interest rate of 6%. Payback rate the existing period also shows 3.2 years or less than the initial development target for 5 years. While the profitability index has also shown a value of more than 1 which is interpreted to generate profits with an index value of 1.3.

Recommendations

This research is limited based on the scope of the feasibility of the business model that has been carried out by the current wood depot for the next 5 years. Further research is expected to be able to take steps to develop wood depots in the future. Therefore, there is a need for other research by paying attention to conditions beyond the feasibility of the economic value of this business model, so that future business models can face social and ecological challenges that are increasingly uncertain, complex, volatile, and ambiguous.

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