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STRATEGIC FORMULATION ANALYSIS OF BUSINESS DEVELOPMENT OF PT MEGA POWER SURYA (A SUBSIDIARY OF PT MEGA POWER TEKNINDO)

Gagah Daruhadi[1*], Elly Yuliati[2], Fitri Mutiara Elgasari[3], Rhian Indradewa[4], Dimas Angga Negoro[5]
Faculty of Economics and Business, Esa Unggul University, Jakarta, Indonesia[1,2,3,4,5]
gagah_d@yahoo.com[1], yulisuhud07@gmail.com[2], fitri.elgasari@yahoo.com[3],
rhian.indradewa@esaunggul.ac.id[4], dimas.angga@esaunggul.ac.id[5]

ABSTRACT

PT Mega Power Surya (MPS) is a subsidiary of PT Mega Power Teknindo (MPT) which is engaged in Renewable Energy, especially the Procurement of Goods and Services for Surya Power Generation as a business diversification of the Company PT Mega Power Teknindo. The main purpose of establishing PT MPS is to take advantage of promising business opportunities in expanding PT MPT's business in the field of Renewable energy on the basis of the encouragement of the Presidential Regulation RUEN, Minister of Energy and Mineral Resources and Local Government (RUED) and RUPTL, sustainable energy factors, Go Green and responding to the increase in electricity rates from PLN so that consumers who use electricity will be interested in using surya power plants, namely using natural resources that never run out even though they are used continuously and it is hoped that the price of electricity for consumers will be cheaper using Surya energy compared to fully using electrical energy from PLN. Companies need to plan strategies and conduct business model analysis. The strategy method uses the Value Proposition Canvas, IFE, EFE, VRIO, CPM, SWOT, IE Matrix, QSPM, Porter's Generic Strategy, and Lean Model Business Canvas. The results of this analysis can help in identifying the appropriate business model. With the right strategy and business model, it will enable the newly created company to become a competitive and sustainable company. Using Value Proposition Canvas, EFE, IFE, VRIO, CPM, SWOT, IE, QSPM, Porter's Generic Strategy, and Lean Business Model Canvas. This analytical method helps in determining the right business strategy for PT. Mega Power Surya.

Keywords: *Strategic Formulation Analysis, Business Development, PT Mega Power Surya*

INTRODUCTION

Indonesia's electricity demand growth is 4.9% per year. Until December 2020, power plants in Indonesia were dominated by PLTU 48.3%, PLTG/PLTGU/PLTMG 32%, and PLTD 7%. Meanwhile, Indonesia has been an importer of petroleum since 2004, and the limited supply of coal is predicted to run out in 2038. To avoid the energy crisis and pollution that pollutes the earth, it is necessary to encourage the use of new and renewable energy (EBT) programs, by the government through Minister of Energy and Mineral Resources No. 50 of 2017 has planned the development of new and renewable energy (EBT) by at least 23% by 2025. Based on the RUPTL 2021-2030, the planned construction of a power plant is 40,575 MW, of which 51.6% are power plants sourced from new and renewable energy in the amount of 20,932 MW (Peraturan Menteri Energi Dan Sumber Daya Mineral Tentang Pemanfaatan Sumber Energi Terbarukan Untuk Penyediaan Tenaga Listrik, 2017).

Among all renewable energy potentials in Indonesia, Surya Power Plants (PLTS) have 50% renewable energy potential, with 207.8 GW of Surya potential (Dirjen EBTKE, 2021; Kementerian Energi dan Sumber Daya Mineral, 2021a; TPSA, 2019). Meanwhile, the installed generating capacity of PLTS until December 2021 is 152.1 MW, so the utilization is still 0.07% (Kementerian Energi dan Sumber Daya Mineral, 2022).

Presidential Regulation No. 22 of 2017 dated March 2, 2017, concerning the General National Energy Plan (RUEN), mandates that PLTS development is projected at 6.5 GW in 2025, 14.2 GW in 2030, and 45 GW in 2050, or 22% of Surya potential (Peraturan Presiden Republik Indonesia No 22 Tahun 2017 Tentang Rencana Umum Energi Nasional, 2017).

The Regional Government in the RUED (Regional General Energy Plan) has set a target for renewable energy capacity in 2025 for a total of 34 provinces reaching 47,658 MW, with the PLTS development plan in the RUED is 7,557.5 MW or 15.9% of the total EBT development

plan (Kementerian Energi dan Sumber Daya Mineral, 2021b). (IESR, 2019) and the National Movement for a Million Surya Roofs (GNSSA) which was initiated to accelerate the construction of rooftop photovoltaic Surya power plants in housing, public facilities, government offices, commercial buildings, and industrial complexes. In addition, PLN electricity tariffs for household customer groups during the 2012-2020 period increased by an average of 8.5% per year, which will encourage PLN Household Consumers to use Rooftop PLTS.

Based on the explanation above, the PLTS Rooftop business opportunity is very promising, with the target consumers in this Business Plan being the household sector, namely, there is potential for the development of PLTS Roofing Customers of Tariff Group R (Household) of 1,525.12 MW in December 2025, and of 3 331.8 MW in 2030 (PT PLN, 2021). In the development of the PLTS system, it is tailored to the needs of its users, effectively utilizes the existing energy potential, supports the reduction of carbon emissions, and provides alternative financing solutions to general consumers (USAID, 2016, 2020).

In this Business Plan, we plan a short term of 2 years with a segmentation target including household consumers of PLN UID Jakarta Raya and household consumers of PLN UID Banten, the medium term is 3 years then expanded to household consumers of PLN UID UID West Java, UID Central Java and Yogyakarta, as well as East Java UID of . Then, a long term of 4 years until 2030 is planned to expand to household consumers of PLN UID Lampung, PLN UID Palembang, and PLN UIW East and North Kalimantan, PLN UIW South Kalimantan and Central Kalimantan.

RESEARCH METHOD

Value Proposition Canvas

1. **Customer Jobs To Be Done**

   The RUEN contained in PP No 22/2017 requires the use of Surya cells at a minimum of 25% of the roof area of luxury houses, residential complexes, apartments, and complexes as a condition for applying for a Building Permit (IMB).

   The public also now views Rooftop PLTS as a long-term investment, because it can save PLN electricity costs, and the excess energy produced can be exported to the PLN network and can be compensated according to the Minister of Energy and Mineral Resources Regulation No. 26 of 2021 with an export tariff calculation of 100% of the PLN electricity tariff. Sunlight is a new renewable energy source and can be obtained free of charge. If PLN's electricity goes out during the day, the community can still be assured of a supply of their electricity source through the Rooftop PLTS (Menteri Energi dan Sumber Daya Mineral, 2021).

   Today's household consumers have a lot of concern for the environment and feel the need to actively contribute to shifting to new, renewable, and environmentally friendly energy. By diversifying electrical energy sources with PLTS Roof, it will reduce coal consumption which will help reduce carbon emissions. The use of PLTS Roof for home consumers has become a trend with the increasing use of PLTS Roof 5 times for household consumers. Based on research on residents of DKI Jakarta conducted by Greenpeace Indonesia in 2020, where 83-85% of PLN consumer respondents with an installed power of 1300-5500 VA have a desire to use PLTS Roof and 96.2% of respondents who are PLN consumers with a power of 6600 VA to above wants to take advantage of PLTS Roof (Gubernur DKI Jakarta, 2019). The survey shows that there is an increase in public interest in PLTS Roof (Setiawan et al., 2020).

2. **Customer Pain**

   Household consumers have a number of concerns with the PLTS Roofing system which is a new thing, including concerns about the initial installation cost which is feared to be quite expensive. In addition, Rooftop PLTS depends on the irradiance of sunlight, so it is feared that if the sunlight output does not meet expectations because for example, the weather is cloudy, the energy received is not optimal. Consumers generally have existing building constructions that are not prepared to accept the burden of Rooftop PLTS, so

consumers are concerned if the roof construction will be disrupted. Consumers also do not want the installation of the LTS Roof to interfere with the beauty of the building. Consumers who are unfamiliar with technical matters are worried if there is a disturbance in the Rooftop PLTS system and the Rooftop PLTS system will not work. In addition, the consumer society. The house also doesn't want to be bothered with the registration and licensing procedures for PLTS Roof which is a requirement for installing PLTS Roof on a grid according to government regulations (Peraturan Menteri Energi Dan Sumber Daya Mineral Tentang Penggunaan Sistem Pembangkit Listrik Tenaga Surya Atap Oleh Konsumen PT Perusahaan Listrik Negara (Persero), 2018).

3. **Customer Gain**

The home consumer community wants a Rooftop PLTS system that is durable and long-lasting, has a long lifetime; and expects Rooftop PLTS that has minimal maintenance and is cheap. If later there is an increase in the need for electrical power due to the addition of the burden of electronic equipment or building expansion, or a change of position due to the expansion of the building, the PLTS Roof system can easily be added to its power capacity from the old PLTS Roof system, at a low price or if consumers move to another house, consumers certainly want the PLTS Roof system to be moved to be adjusted. Consumers whose homes use PLTS Roofs will be happy if they get recognition from friends or colleagues, especially if they get praise for their concern for the environment. Consumers are also happy if they can monitor the actual amount of electricity cost savings and the amount of excess energy exported to the PLN network.

Business Solutions

1. **Pain Reliever**

One of the main concerns of consumers is that the initial investment is quite expensive. PT Mega Power Surya (MPS) in addition to serving hard cash payments, will also offer financing solutions through soft cash, installments or credit. The third solution is the Rooftop PLTS rental system, where consumers pay monthly electricity bills generated by long-term PLTS with a certain rental period, it is hoped that the value of the bill paid is lower than the value paid if the energy uses PLN energy (Wheelen et al., 2017). This is a solution for consumers to choose the most suitable payment system according to consumers. MPS will provide comparisons between various payment systems and illustrations of installments and payback periods. To accommodate consumer concerns in the event of a disturbance to the Rooftop PLTS system, MPS will provide after-sales service which includes 24-hour customer service to guide if there are a disturbance and service technicians who come to the location to help resolve existing disturbances. To save time and speed up the PLTS Rooftop licensing process, MPS will also provide assistance if consumers want to process an application for PLTS Roofing registration, and licensing according to the rules up to the Operational Licensing. MPS will provide design optimization in accordance with the existing roof construction and provide suggestions and design optimization to choose the type of Surya panel module that suits the roof construction and desired power requirements. With the help of software, MPS will provide an illustration of the energy produced throughout the year by taking into account shading, weather predictions, Surya irradiation, and system losses so that it is hoped that the actual Surya energy can approach the illustration and give consumers an idea of how much energy can be generated with the Rooftop PLTS system (Supriyono et al., 2022).

2. **Gain Creator**

MPS will provide a warranty on the main equipment of the Surya panel module and a performance guarantee to provide material quality assurance to consumers. Materials. PLTS Roofs have minimal maintenance and are easy to care for yourself. MPS will provide a maintenance instruction manual to provide instructions on how to properly carry out maintenance independently. However, if needed, MPS also provides maintenance services.

As part of the value proposition, MPS will provide a PLTS Roof system solution by

adjusting the power capacity needs, consumer budgets, and consumer roof area by providing alternative solutions based on material types, specifications of Surya panel modules and inverters as well as optimizing the engineering design for the position of the Surya panels at an angle of inclination. tilt, azimuth, and module efficiency and system losses. MPS will provide an application that consumers can use to monitor the Surya energy produced, the energy supplied to the load, and the excess energy exported to PLN (Fahrizal et al., 2022).

The Rooftop PLTS system offered by MPS is modular, making it possible for additional power if consumers want an increase in the power capacity of Rooftop PLTS. The Surya panel modules can be disassembled and reassembled easily, even the entire Rooftop PV system can be moved to another building with only minor changes such as replacement and adjustment of cable lengths.

3. Products and Services

The products and services offered by Mega Power are the On Grid PLTS Rooftop system (connected to the PLN network) for PLN customers of the Type R tariff class (Household). The power capacity of the Rooftop PLTS on Grid offered is 1 kWp, 2 kWp, 3 kWp, 4 kWp, 5 kWp, 6 kWp, 7 kWp, 8 kWp, 9 kWp, 10 kWp, 11 kWp, 12 kWp, 13 kWp, 16 kWp , 23 KWp, 33 KWp and 40 KWp.

There are 3 different payment schemes offered by consumers, namely 1) hard cash; 2) installments in stages, or 3) monthly rent with a certain rental period.

The Rooftop PLTS system offered adapts to consumer power needs and does not exceed the power capacity connected to PLN according to government regulations. Mega Power provides optimization solutions based on the type of Surya panel material offered, power specifications, and inverter specifications as well as brands that adapt to consumer budgets (Setyoko et al., 2022). Mega Power provides quality assurance in the form of a Main material guarantee. Mega Power also sells spare parts to serve consumer needs. Every PLTS Rooftop consumer will be equipped with an IoT-based mobile application to monitor the actual energy produced by Surya panels, which are exported to PLN and used by consumers, this is in accordance with the payment system and consumer desires. Consumers can find out the savings that have been obtained from the installation of PLTS Roofs. Likewise, rooftop PLTS users will also be able to provide remote facilities via an application to turn on or turn off the electricity supply on the side after the kWh Meter exim if needed.

Mega Power provides engineering consulting services, such as PLTS Roof design services. As part of fulfilling customer satisfaction, Mega Power provides maintenance services and technician services in the event of a disturbance, as well as registration and licensing services for Rooftop Surya Power Plants (Subhan et al., 2022).

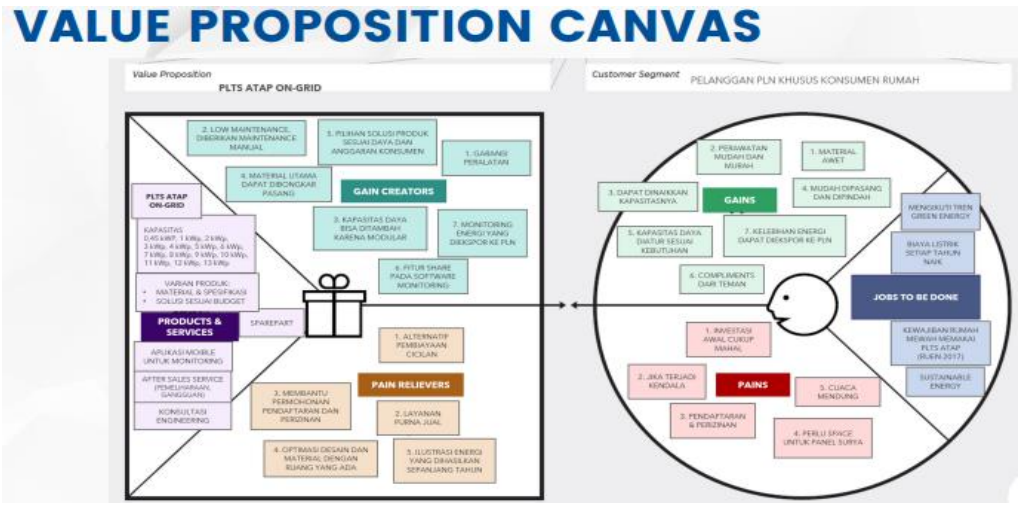


Figure 1
Value Proposition Canvas

External Factor

In the external analysis, Porter's Five Forces model and PEST analysis were used. Five Force Analysis is used to analyze the company's external environment based on competition between similar existing companies, the threat of new entrants, the threat of substitute products, the bargaining power of buyers, and the bargaining power of suppliers (David & David, 2017). PEST external factor analysis in determining the opportunities and threats in the Rooftop PV mini-grid business is very important. PEST analysis is an analysis of external factors which include political, economic, social, and technological factors.

Internal Factor

Resources are productive assets owned by the company, while capabilities are what the company can do. Each resource that is managed well together can create organizational capabilities. Organizational capabilities, when applied through the right strategy, will become supporters of competitive advantage. So that resources are productive assets owned by the company are very important to be a concern in supporting the success of a company's competitive advantage, namely by analyzing the strengths and weaknesses of the company's internal factors become very important (Jones et al., 2021).

Strategic Plan

Based on the company's vision and mission, in its business the company makes short-term (1-2 years), medium-term (3-5 years), and long-term (6-9 years) targets, then conducts strategic analysis starting from the input stage, the matching stage then decision stage, the analysis adds a business level strategy and a business model canvas.

RESULT AND DISCUSSION

Internal Factors Analysis of the Assessment of Resources and Capabilities

If the key success factor according to (Grant, 2016) in the PTLS MPS business is being able to use tangible resources (physical, infrastructure, financial), intangible (technology, reputation, culture), and human resources (skills, collaboration, motivation) by paying attention to industry key successes Factor, then the Company is able to compete and gain profits.

Where the ability of the Resources of the MPS Company is to identify Internal Strengths consisting of Building Values, Workshops, Warehouses and Company inventory, Financial capabilities, Technology, Reputation, culture, and Human Resources, Organizations must have a business strategy to manage the company, with existing internal capabilities So it is hoped that companies can get competitive prices, good service systems, better product quality, manage company organizations, maximize human resource development, carry out marketing relations functions, create good product distribution, have product innovations, IOT system innovations and manage adequate preparations so that the Company gains a competitive advantage. The Assessment of Resources and Capability of the main resources and capabilities needed in the PLTS business and assess MPS's position against competitor groups.

In terms of strategic implications, the main resources that differentiate MPS are the advantages of financial capability, adequate physical facilities, company reputation, and human resources that can offer good competition on price, quality and service. Therefore, to achieve efficient scale, with experience MPS in the field of PLTS is still limited, so they have to collaborate with other experienced companies

Analyzing VRIO (Valuable, Rare, Inimitable, Organized to Capture Value)

The VRIO framework is a tool for analyzing the internal resources of a company and its capabilities to determine whether the company can become a source of sustainable competitive advantage. In the VRIO analysis, the company will analyze the following four questions (Antonio, & Cardael, 2012):

Table 1
MPS VRIO Analysis

Company Capability	Values?	Rate?	Inimittate?	Organized?	Implications for Competition

	(V)	(R)	(I)	(O)	
Location	Yes	Yes	-	Yes	Temporary competitive advantage
Reputation	Yes	-	-	Yes	Temporary competitive advantage
Finance	Yes	-	Yes	Yes	Competitive Parity
Product Quality Management	Yes	Yes	Yes	Yes	Competitive advantage sustainable
Skills/ Know How	Yes	Yes	Yes	Yes	Competitive advantage sustainable
Capacity for Communication and Collaboration	Yes	Yes	-	Yes	Temporary competitive advantage

Based on that on the IFE (Internal Factor Evaluation) data matrix, PT MPS has received an A total score of 3,000. This shows that PT MPS has an A total score above the average of 2.50, indicating that PT MPS responds well to strengths and weaknesses.

Table 2
Internal Determining Factors

No	Internal Determining Factors	Weight (a)	Rating (b)	Score (a×b)
	Strenght			
1	Financial Resources	0,10	4	0,40
2	Office Buildings, Warehouse Workshop, inventory	0,10	4	0,40
3	Technology	0,05	3	0,15
4	Reputation and Culture	0,05	3	0,15
5	HR Competence	0,05	3	0,15
6	Services to Consumers	0,05	3	0,15
7	Price	0,10	3	0,30
8	Company Organization	0,05	3	0,15
9	Human Resources Management	0,05	3	0,15
10	Consumer Payment Product Innovations	0,075	4	0,30
11	IoT System Innovation	0,05	3	0,15
12	Product Quality	0,05	3	0,15
	Total Strength	0,775		2,60
	Weakness			
1	sources of Raw Materials and Supplies	0,075	2	0,15
2	Relations and Marketing	0,05	1	0,05
3	Channel Distribution	0,05	1	0,05
4	Rooftop PLTS Project Experience	0,05	1	0,05
	Total Weaknesses	0,225		0,40

Total	1,00	3,00

External Factor Analysis

The external factor analysis is PEST analysis, and EFE (External Factor Evaluation). External factors can be concluded as Opportunity (O) and Threat (T).

There are five of Porter's strengths to be analyzed; are Threat of New Entrants, Bargaining Power of Buyers, Threat of Substitute Products, Bargaining Power of Suppliers, and Competition between Existing Firms (Porter, 2008). In carrying out Porter's Five Forces analysis, it is done by giving weights and indexes to each strength. factors of that five strengths. The results of the weights and indices are multiplied and the results are added.

Porter's Five Forces Analysis

Five Force Analysis is used to analyze the company's external environment based on competition between similar existing companies, the threat of new entrants, the threat of substitute products, the bargaining power of buyers, and the bargaining power of suppliers (David, 2016).

Quantitative weighting measures are as follows:

1. Determine the index value for each competitive strength factor;
   a. Index value 1: the level of influence of a factor on competitive strength tends to be low and does not have a significant influence on competition in the industry
   b. Index value 2: the level of influence of a factor on competitive strength has a significant influence on competition in the industry
   c. Index value 3: the level of influence of a factor on competitive strength has a very significant influence on competition in the industry
2. Determine the weight for each factor based on justification for the value that most influences competitive strength, the sum of the weighting results must be 1, where the value 0 is the value that least affects competitive strength. Justification of weighting based on group analysis results.
3. Multiply the weight of each factor with the index, then add up and conclude that the value is based on a predetermined range

If the quantitative calculation results of Porter's analysis are in the range of 1.00-1.66, it can be categorized as low, where the company is in less competitive competition. Meanwhile, if the quantitative results produce results in the range of 1.67-2.33, it is categorized as moderate, meaning that the company is in quite intense competition. Quantitative results that are in the range 2.34-3.00 are categorized as high parameters, which means the company is in an industry that has a high level of competition and is very competitive

Parameters	Value
Low	1.00 …….. 1,66
Medium	1,67 ……. 2,33
High	2,34 …… 3,00

source: (Porter, 2008)

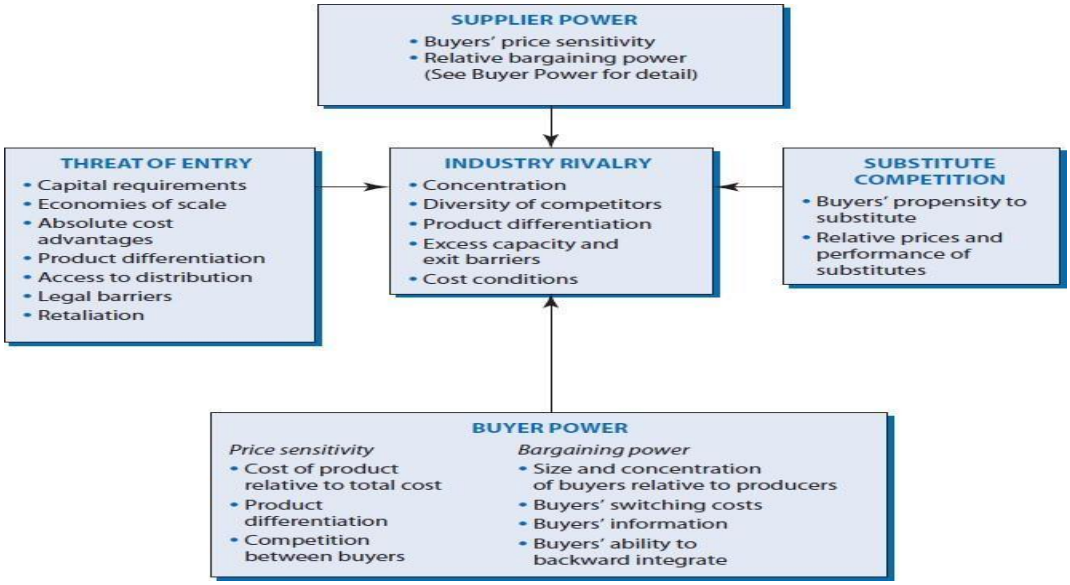


Figure 2
Supplier Power

Table 3
MPS evaluation results Total Value of Porter's Five Force

FORCES	Value
Rivalry between Established Competitors	1,9
Threat of New Entries	1,9
Bargaining Power of Suppliers	1,6
Threat of Substitution	1,0
Bargaining Power of Buyers	2,5
Total Average Score	1,78

Based on Tables II.2 and II.3, the average value of Porter's Five Forces is 1.78, so the overall pressure is moderate towards low. With medium-high consumer bargaining power and moderate competitor competition, low threat of substitution, and medium-low bargaining power of suppliers, this industry is worth entering. PT Mega Power Surya must be able to have a competitive advantage compared to other competitors and must be able to respond well to consumer needs to overcome the bargaining power of buyers.

External Factors Facter Analysis (PEST)

Based on Tables II.2 and II.3, the average value of Porter's Five Forces is 1.78, so the overall pressure is moderate towards low. With medium-high consumer bargaining power and moderate competitor competition, low threat of substitution, and medium-low bargaining power of suppliers, this industry is worth entering. PT Mega Power Surya must be able to have a competitive advantage compared to other competitors and must be able to respond well to consumer needs to overcome the bargaining power of buyers.

Table 4

External Factors Facter Analysis (PEST)

No	External determinants	Weight (a)	Rating (b)	Score (a×b)
	Opportunities			
1	Government Support	0,10	4	0,40
2	Surya Energy Potential	0,10	4	0,40
3	Energy Tariff Determination	0,10	4	0,40
4	Housing Consumer Interest in Surya Rooftops	0,10	2	0,20
5	Technology Development of Surya Panel System	0,07	3	0,21
6	Technology Development of Surya Panel System	0,07	3	0,21
7	Obligation of Luxury Homes to use PLTS	0,05	3	0,15
8	Go Green	0,05	3	0,15
	Number Of Opportunities	0,67		2,31

No	External determinants	Weight (a)	Rating (b)	Score (axb)
	Threat			
1	Competitors	0,05	2	0,10
2	Export Tariff Regulation to PLN network	0,05	3	0,15
3	The Presence of Raw Materials	0,05	3	0,15
4	Economy due to Pandemic	0,05	1	0,05
5	Subsistence Sales to Homes type Power 900 Watts and below.	0,05	1	0,05
6	Kwh Meter import supplied by PLN	0,04	3	0,12
7	USD Exchange Rate	0,04	2	0,08
	NUMBER OF THREATS	0,33		0,70
		1,00		3,01

From the EFE matrix table above it is known that the score for weight and rating shows the number 3.01. This number is considered good, meaning that Mega Power has a pretty good opportunity because the value is above 3, this is due to the market trend which has increased significantly over the last 3 years and the existence of government regulations that support the development of Rooftop PLTS.

Competitive Profile Matrix (CPM)

Table 5
Competitive Profile Matrix

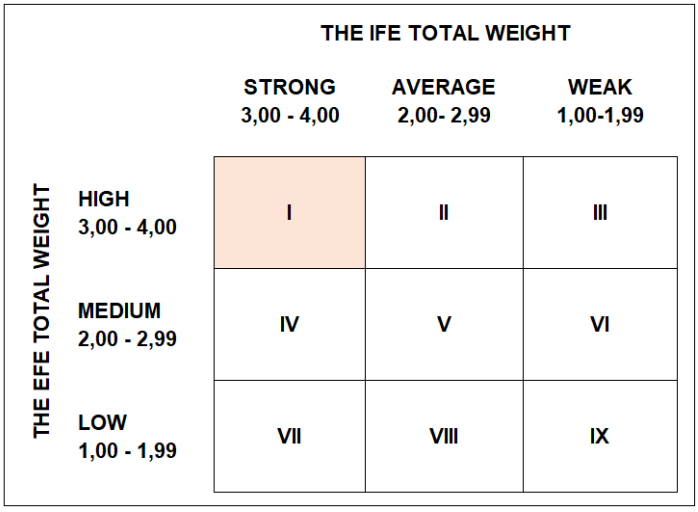
No	Critical Success Factor	Bobot	PT Mega Power		PT AS		PT ST	
			Rating	Score	Rating	Score	Rating	Score

1	Financial Position/Ekuitas	0,15	4	0,60	3	0,45	4	0,60
2	Experience	0,05	2	0,10	4	0,20	4	0,15
3	Office Premises, Equipment, Workshops	0,10	4	0,40	3	0,30	4	0,40
4	Marketing	0,10	2	0,20	3	0,30	3	0,30
5	Price Competitive	0,15	3	0,45	3	0,45	3	0,45
6	Product Quality	0,05	3	0,15	4	0,20	4	0,20
7	Type of Supply	0,07	2	0,14	3	0,21	3	0,21
8	After Sales (Warranty)	0,05	3	0,15	3	0,15	3	0,15
9	Payment Method	0,15	4	0,60	3	0,45	3	0,45
10	Development/Inovasi	0,05	3	0,15	3	0,15	3	0,15
11	Geographical Coverage	0,05	2	0,10	3	0,15	3	0,15
12	Website	0,03	3	0,09	4	0,12	4	0,12
	Total of Opportunities	1,00		3,13		3,13		3,38

In this Matrix, numbers are based on estimates that are close to the Company's Website data based on experience, office location, the value of work and experience, method of payment, ability to value work, type of supply, price, the scope of supply, Matrix CPM Results PT ST is superior with a score 3.3 while PT Mega Power Surya is 3.13 and PT AS, the value is 3.13, meaning that even though PT Mega Power Surya is just starting the PLTS business, it is hoped that it will not take too long to develop in its business. It is hoped that it will be better than PT AS because the score of PT The Mega Power Surya is close to the company's.

IE Matrix

Table 6 IE MATRIX



Based on the Internal External Matix results above, the IFE is 3.00 and the EFE is 3.01, that the MPS company, even though it has financial factors and supporting office and warehouse

facilities, it has not had experience in handling the Procurement of goods and services specifically for PLTS, is inexperienced and even though it has experience in the field Procurement and services that are similar and more complex, are still not supportive because they are related to a new marketing model, new types of products, so the quality of the product cannot be shown and the selling value cannot be proven to consumers, even though the 3kWp Roof PLTS work has been installed as a dummy project that has been energized since April 26, 2022.

SWOT analysis

Strength, Weakness, Opportunity and Threat (SWOT) matrix is an important Matrix used by the Company in developing four types of strategies: SO (Strength-Opportunity) strategy, WO (Weakness-Opportunity) strategy, ST (Strength-Threat) strategy, and WT strategy (Weakness-Threat). SO strategy uses the company's internal strengths to take advantage of external opportunities. The WO strategy aims to improve internal weaknesses by taking advantage of external opportunities. The ST strategy uses the company's strengths to avoid or reduce the impact of external threats. The WT strategy is a defensive tactic aimed at reducing internal weaknesses and avoiding external threats.

Table 7 SWOT Analysisi

	Strength (S)	Weakness (W)
	1. Financial Resources 2. Office and Other Technology Assets 3. Reputation and Culture 4. HR Competency 5. Service 6. Consumer 7. Price 8. EPC Corporate Organization 9. Human Resources Develop 10. Product Innovation	Source of Raw Materials Product Quality Relations and Marketing Channels Distribution Experience IoT System Innovation
Opportunity (O)	SO STRATEGIES	WO STRATEGIES
Government Support	Allocation of promotional costs for home consumers including housing complexes and luxury homes in print media and social media (S1, O4, O7)	Following the PLTS Atap tender in the government or BUMN through a consortium, home consumers (W1, W2, O1, O4)
Surya Energy Potential		
Penetapan Tarif Jual Energi		
Consumers who need more power during the day	Financing innovations for consumers (S10, O4, O6, O7)	Agency system as a marketing channel distribution for home consumers including luxury homes in the Central and Eastern Indonesia area (W3, W4, O4, O7)
Development of Surya Roof System Technology	Calculation services for initial cost optimization, and return on investment	

	for consumers (S6, S7, S10, O3, O6)	
Bank Financing Support		
Obligation of Luxury Homes to use PLTS	Designing, material procurement, installation of PLTS Roof installation system (S1, S2, S3, S5, O7)	
Environmentally friendly and independent of fossil fuels		
Threat (T)	ST Strategies	WT Strategies
Competitors	Market segmentation strategy for power consumers 1300VA and above (S6, S7, T5)	Optimization and management inventory storage (W1, W5, T3, T7)
Uncertain electricity export tariff (suspended)		
The Presence of Raw Materials	Financing innovation for power consumers 1300 VA and above (S10, T4, T5)	Acceleration of KWh Meter Export Import (W3, T6) management
Economy due to Pandemic		
Government subsidies for electricity tariffs with power of 900 watts and below	Customer service i.e. licensing, product warranty, installation, maintenance (S5, S6 T1, T6)	
Kwh Meter export import provided by PLN		
USD Exchange Rate		

The Decision Stage (QSPM)

Quantitative Strategic Planning Matrix or QSPM Analysis is an analytical tool for selecting strategies based on the attractiveness of strategic alternatives (Ismail et al., 2022). The QSPM calculation is based on input from internal outside the weight matrix, as well as alternative strategies at that stage.

QSPM analysis of the strategy to be carried out by PT MPS can be seen in the QSPM analysis table below:

Table 8 Table QSPM

No	DESCRIPTION		Consumer Financing Innovation with Bank facilities		Self-financing (internal)	
		WEIGHT	AS	TAS	AS	TAS
		(a)	(b)	(axb)	(b)	(axb)
	INTERNAL DETERMINANTS					
	STRENGTH					
1	Financial Resources	0,10	4	0,40	2	0,20
2	Office Building,Warehouse Workshop	0,10		0,00		0,00

3	Technology	0,05		0,00		0,00
4	Reputation and Culture	0,05	4	0,20	3	0,15
5	HR Competency	0,05	3	0,15	2	0,10
6	Service to Customers	0,05	4	0,20	3	0,15
7	Price	0,10	3	0,30	1	0,10
8	Corporate Organization	0,05	3	0,15	2	0,10
9	Homen Resources Management	0,05	3	0,15	2	0,10
10	Consumer Payment Product Innovation	0,075	4	0,30	2	0,15
	WEAKNESES					
1	Source of Raw Materials	0,075		0,00		0,00
2	Product Quality	0,05		0,00		0,00
3	Relationships and Marketing	0,05	3	0,15	2	0,10
4	Channel Distribution	0,05		0,00		0,00
5	Surya Roof Project Experience	0,05		0,00		0,00
6	IoT System Innovation	0,05	3	0,15	2	0,10
	EXTERNAL DETERMINANTS					
	OPPORTUNITIES					
1	Government Support	0,10	3	0,30	2	0,20
2	Surya Energy Potential	0,10		0,00		0,00
3	Energy Tariff Determination	0,10		0,00		0,00
4	Housing Consumer Interest in Surya Power Plant	0,10	3	0,30	2	0,20
5	Development of Surya Panel Technology	0,07		0,00		0,00
6	Bank Financing Support	0,10	4	0,40	2	0,20
7	Obligation of Luxury Homes to use PLTS	0,05		0,00		0,00
8	Go Green	0,05		0,00		0,00
	THREATS					
1	Competitors	0,05	3	0,15	2	0,10
2	Export Tariff Regulation to PLN network	0,05		0,00		0,00
3	The Presence of Raw Materials	0,05	3	0,15	2	0,10
4	Economy due to Pandemic	0,05	3	0,15	2	0,10
5	Home Sales ≤900 W Power Type	0,05	3	0,15	2	0,10
6	Kwh Meter import supplied by PLN	0,04		0,00		0,00
7	USD Exchange Rate	0,04	3	0,12	2	0,08
	TOTAL	**2,00**		**3,87**		**2,33**

Based on the QSPM table above, of the two alternatives between the alternative use of financing innovations with bank facilities is more attractive than independent financing without bank facilities

General Strategy Porter

Porter Generic Strategies is divided into 5 types, namely Type 1: Low Cost-Strategy, Type 2: Best Value Strategy, Type 3: Differentiation, Type 4: Low-Cost Focus, Type 5: , then the business level strategy carried out by PT SJA is Cost Leadership, one of which is a generic strategy, in which the strategy undertaken by the company prioritizes a lower cost structure than the industry average.

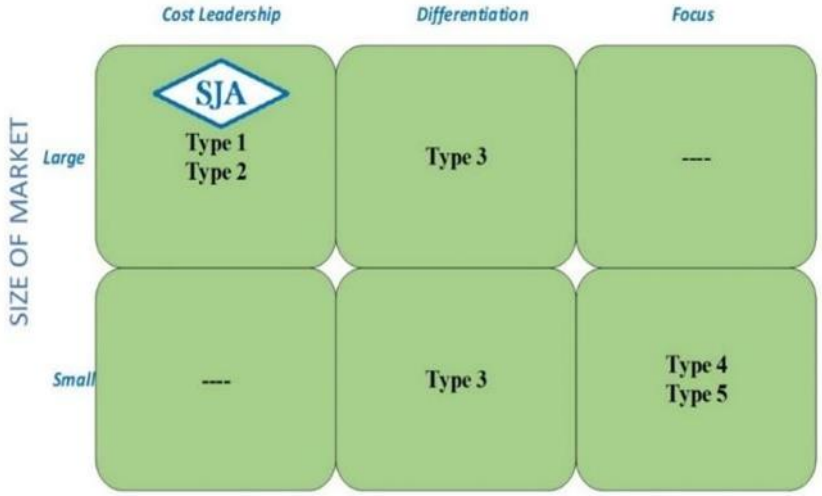


Figure 3
General Strategy Porter

Business Model Canvas

Table 9
Bussines Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
1. Manufacturer or distributor of Surya panels, inverters, batteries, panel boxes, cables, MCB, etc.	1. Marketing 2. Engineering 3. Procurement 4. Production 5. Construction 6. Distribution Key Resources	1. Provide comprehensive services, engineering design optimizatio, licensing, product warranty and installation, routine maintenance	1. Customer service 2. Media sosial 3. Diskon dan promo Channels	Business to Consumer Household Consumers with power starting from 1,300 VA up to capacity Tindescent Business to Business

2. PLN 3. Bank 4. Operating Feasibility Certification Body 5. Government department 6. Local Government	1. Financial Resources 2. Offices and production sites 3. TBSP 4. Tools and equipment for installation & testing commissioning	services, and afer sales services 2. Offer alternative financing facilities in collaboration with Banks 3. Application Monitoring	• Public Relations • Tender • Agency • Digital Advertising • Social Media	- State-owned and private housing consumers - Consumer property developers

Cost Structure	Revenue Streams
1. Initial Cost (Investment tools &; equipment) 2. Overhead Cost (Indirect Labor cost, administrative and general costs, etc.) 3. Direct Cost (Material, direct labor cost, marketing costs, transportation, etc.)	• Direct selling of PLTS Roof installation work • Project Tender • Maintenance Work

CONCLUSION

Based on the results of the above analysis, starting with determining the value proposition canvas, analyzing external and internal business factors, then proceed with the analysis of E FE, IFE, VRIO, CPM, SWOT, IE, QSPM and Porter's Generic Strategy, so that PT MPS can be built properly . Finally, the business activities carried out are included in the Lean Business Canvas Model, so that the business will be able to compete and be sustainable

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