

Business Model Canvas Analysis of Property Asset Management at PT PLN (Persero) Unit Induk Distribusi Banten

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Based on Asset data managed by the Property and General Assets Division of PT PLN (Persero) UID Banten. There are 29 units of Potential Property Assets that can be utilized until the end of 2023. The achievement of PLN (Persero) UID Banten Revenue was achieved by 94% of the 2023 revenue target with a record of utilizing 16 units. One of the strategic elements in contemporary company management that focuses on increasing revenue is property asset management. Property assets, including shopping centres, commercial buildings, and industrial facilities, have great potential to be optimized so that they can make a significant contribution to the company's revenue. One of the potential revenue enhancements is to manage property assets using the BOT (Build, Operate, Transfer) scheme. This research is designed are 1) To find out the Business Model Canvas of property asset management in existing conditions; 2) To determine the results of analysing current property asset management with Business Model Canvas; 3) To analyse the internal and external environment in the management of PLN property assets and provide recommendations for the Business Model Canvas. The research was conducted using a qualitative approach. Data collection is done using Deep interview, and Observation. Validity and reliability test techniques using triangulation. SWOT Matrix is used to analyse internal and external factors using primary and secondary data obtained. The SWOT Matrix will be arranged in accordance with current business processes and analysed using TOWS to see the potential for appropriate strategies (SO, ST, WO, WT) and strategy prioritization. These strategies will be integrated into a Business Model Canvas that is recommended to stakeholders.

Keywords: Revenue, Strategy, SWOT, Business Model Canvas, BOT.

1. Introduction

PLN faces various big challenges that must be answered with all out. With three main challenges, namely Energy Transition challenges, Business Development challenges and Technology Adoption challenges. PLN has a Cash War Room (CWR) program. CWR is a program that focuses on strengthening financial management comprehensively, both in terms of budget control and performance, liquidity management and debt management, as well as asset valuation management. In 2024, CWR began to add a focus on efforts to increase the top line through sales and distribution optimization (Press Release No. 118.PR/STH.00.01/IV/2024). PT Perusahaan Listrik Negara (Persero), hereinafter referred to as "PLN", is one of the state-owned companies engaged in the generation, transmission and distribution of electricity. In connection with the above, certain strategies are needed for PLN to increase revenue from Property Asset Management.

One of the strategic elements in contemporary enterprise management that focuses on increasing revenue is property asset management. Property assets, including shopping malls, commercial buildings, and industrial facilities, have great potential to be optimized so that they can make a significant contribution to the company's revenue. One of the increasingly popular cooperation models in this context is Build Operate Transfer (BOT).

In the public-private partnership (BOT) model, the private sector is responsible for designing, financing, constructing, and operating the asset for a certain period of time before ownership is handed back to the government or the original asset owner. Yescombe (2011) states that this model allows for better risk sharing between the private sector and the government. In addition, it also helps the government reduce the financial burden during the development stage (Priyadi & Prasetyo, 2018). In property asset management, the implementation of BOT improves operational efficiency, reduces investment risk, and improves services through more competitive private management.

In Indonesia, infrastructure projects such as toll roads, airports, and ports have used BOT. However, little research has been done to use this model in commercial property asset management. This research focuses on the application of the BOT model as a strategy to increase company revenue due to the rapid growth of the property industry in Indonesia and the increasing need for modern and efficient commercial facilities.

This study investigates the ways in which the BOT mechanism can be effectively used to increase a company's profitability in property asset management. It is based on the idea that innovative and effective asset management is key to creating added value for businesses. By using the asset management (BOT) model, companies can access financial and technical resources from private partners, and utilize their operational expertise to improve the quality and performance of property assets. In addition, the right BOT arrangement can help companies reduce operational and financial risks.

In addition, this research will investigate the various critical elements that influence the successful implementation of a property asset management (BOT) model. These factors include legal, financial, and managerial elements, which all play a role in determining how effective the BOT model is. Case studies conducted on several companies in Indonesia that have implemented this model will be used to evaluate how the implementation of this model

has a direct impact on increasing the company's revenue.

Therefore, this study is expected to add to the literature on property asset management and provide practical guidance for companies considering the adoption of the BOT model as a revenue enhancement strategy. In addition, the findings of this study are also expected to assist policy makers in developing regulations that support the effective and efficient implementation of the BOT model in the property sector.

Box 2: Types of Public–Private Partnership

Public–private partnerships (PPPs) are categorized into contract types according to the roles of the public and private parties in delivering infrastructure projects, as shown in the table below. Design–build–finance–operate (DBFO), build–transfer–operate (BTO), and build–operate–transfer (BOT) are normally regarded as PPPs. Some scholars (e.g., Trebilcock and Rosenstock [2015]; Engel, Ronald, and Galetovic [2014]) regard build–own–operate (BOO) projects in which the asset remains with the private proponent at the end of the contract period as privatization (not PPPs), while other scholars (e.g., Yescombe [2007]) see BOO as a form of PPP.

Private Participation						
Weak ←-----→ Strong						
Public–Private Partnerships						
Contract Type	Public Sector Procurement	Franchise (Affermage)	Design–Build–Finance–Operate (DBFO)	Build–Transfer–Operate (BTO)	Build–Operate–Transfer (BOT)	Build–Own–Operate (BOO)
Construction	Public sector	Public sector	Private sector	Private sector	Private sector	Private sector
Operation	Public sector	Public sector	Private sector	Private sector	Private sector	Private sector
Ownership	Public sector	Public sector	Public sector	Private sector during construction, then public sector	Private sector during contract, then public sector	Private sector
Who pays?	Public sector	Users	Public sector or users	Public sector or users	Public sector or users	Public sector or users
Who is paid?	N/A	Private sector	Private sector	Private sector	Private sector	Private sector

Note: DBFO is also known as design–construct–manage–finance (DCMF) or design–build–finance–maintain (DBFM). BTO is also known as build–transfer–lease (BTL), build–lease–operate–transfer (BLOT), or build–lease–transfer (BLT). BOT is also known as build–own–operate–transfer (BOOT).
Source: Prepared using Yescombe (2007: 12).

Figure 1: Public Private Partnership Scheme
(Source: ADB Institute)

As stated by the Asian Development Bank (2017) in their report on PPPs in developing countries, this is in line with national goals to increase private investment in infrastructure and property development. However, managing property asset management is increasingly difficult as data and business process complexity grow. Some of the existing problems include: problems with property asset revenue management, problems with property asset utilization management, lack of budget business process management features, and reports need to be updated to match the business processes of PT PLN (Persero).

Based on the Regulation of the Board of Directors of PT PLN (Persero) in order to optimize the utilization of property assets in the form of land and / or buildings, PT PLN (Persero), subsidiaries, or affiliated companies can carry out the utilization of Property Assets, with the Property Asset Utilization Cooperation Model consisting of:

1. Rent

The Lease period is a maximum of 5 (five) years and may be extended based on evaluation and agreement of the parties at a maximum of 2 (two) extensions. Lease period of more than 5 (five) years can be implemented if it is used for Power Plant purposes, other than such designation, the approval of the relevant Board of Directors is required.

2. Borrowing

The maximum period of Borrowing and Use is 3 (three) years and can be extended based on evaluation and agreement of the parties at a maximum of 2 (two) extensions. In the event of a period of more than 3 years, it can be implemented after obtaining approval from the relevant Board of Directors.

3. Partnership

The partnership period is determined based on the agreement of the parties, with the object of the partnership in the form of Land / Building owned by PLN. The partnership can be implemented by establishing a Joint Venture or KSO. The partnership process is carried out by PLN Head Office.

The Partnership Scheme is determined based on the suitability of the commercial aspects of each cooperation object consisting of:

- 1. Build-to-Sell (BGS)
- 2. Bangun Serah Guna (BSG)
- 3. Build Handover
- 4. Other schemes that can provide optimal benefits for PLN

The stages in the cooperation process carried out by PT PLN (Persero) are as follows:

- 1. Planning Stages
- 2. Stages of Development

In order to improve the company's performance through the many potential assets owned, PT Kereta Api Indonesia (Persero) continues to optimize its asset exploitation through non-transport commercialization business, in addition to the passenger and freight transportation business. The form of KAI non-transport commercialization is in the form of cooperation in the utilization of station assets, facilities, ROW (right of way), non-ROW, and museums. Sourced from the benchmark results conducted by PT PLN (Persero) with PT Kereta Api Indonesia (Persero), Asset Optimization is regulated based on the following authorities:

Table 1. Optimization of KAI Assets Based on Authority

Time period	Terms	Type of cooperation				
Short Term	1. Authority of the Board of Directors	Build-to-Sell	Build and Use	Operation Cooperation	Business Cooperation	Rent
	2. Cooperation time up to 0 years					

	3. billion	Maximum value Rp. 20					
Long Term	1. 2.	Requires GMS Cooperation time >10 years	Build-to-Sell	Build and Use	Operation Cooperation	Business Cooperation	Rent

(Source: PT KAI's Asset Management Benchmarking Material)

The stages in the cooperation process carried out by KAI are as follows:

1. Asset Mapping
2. Asset Profile
3. Study
4. Marketing
5. Partner Selection

In managing its assets, PT KAI uses the Asset Portal Application in every activity of recording, updating data, commercialization and reporting.

2. Research Methods

In this study, researchers used a qualitative approach. Qualitative research according to Miles is a comprehensive and in-depth approach to understanding social phenomena, which relies heavily on the involvement of researchers in the context under study as well as careful and reflective data analysis (Miles et al., 2014). In terms of conducting qualitative research, mentioned by (Miles et al., 2014) it is necessary to be careful with various sources of analytic bias that can weaken or even cancel the findings.

Data obtained using Primary Data and Secondary Data. Primary Data is data taken directly by researchers using the Deep interview method to obtain information related to management carried out, problems faced, services, how to overcome problems that occur, and development strategies. Interviews were conducted with KKK Senior Managers, Property and General Asset Managers, employees who carry out asset management. While from external parties, interviews were conducted with customers who have made asset lease contracts with PT PLN (Persero) UID Banten. Meanwhile, secondary data is a data source that is not directly obtained by researchers. This data is documentation in the form of photographs, literature studies or internet sites related to the problem being studied.

At the data collection stage, research criteria from previous studies, literature studies and conducting deep interviews with property asset managers at PT PLN (Persero) UID Banten. The selection of interview respondents is based on the proximity to the information sought using a certain position level, starting from the executive level to the decision-making level at the Middle Management level. This is done to solve problems and explore perceptions related to the problems faced in managing Property Assets.

Table 2: Type of Data, Sources and Research Respondents

No.	Analysis	Data Type	Source	Source
1	Determination of SWOT analysis	Primary	Interview	Property Asset Management PLN UID Banten, Customer
2	Determination of Business Model Canvas	Primary	Interview	Property Asset Management PLN UID Banten, Customer

(Source: processed data)

At this stage the results of data collection will be used to design SWOT and TOWS matrices and the preparation of the existing Business Model Canvas. In the data collection process, the define and ideation process is carried out, and by combining the literature study conducted, Business Model Canvas recommendations can be made to increase revenue from property asset management.

Qualitative procedures differ from traditional quantitative approaches in collection, analysis, interpretation, and report writing. They involve purposeful sampling, open-ended data collection, text or image analysis, representation of information in the form of figures and tables, and personal interpretation of research results. At this stage the researcher uses analysis with the SWOT method.

3. Results and Discussion

Existing BMC

Before providing BMC strategy recommendations to PT PLN (Persero) UID Banten, BMC analysis was first carried out on the current conditions.

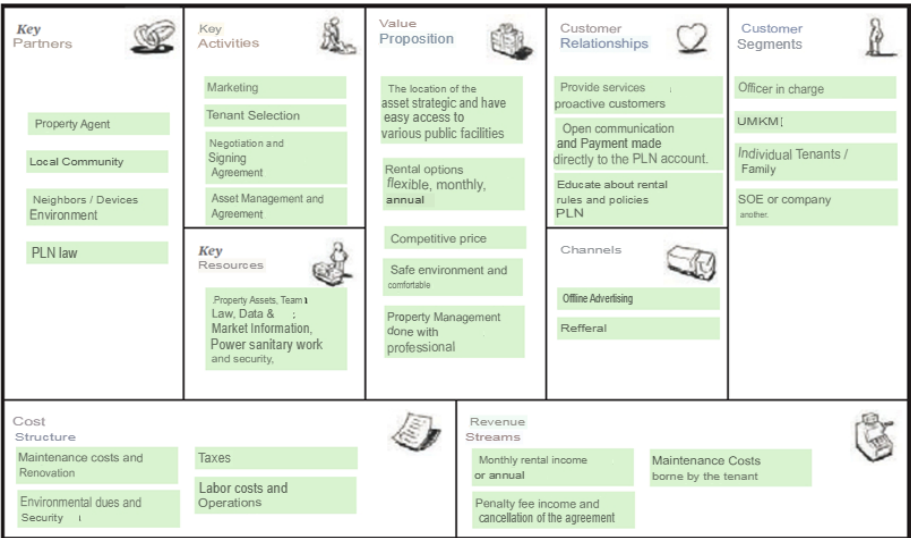


Figure 2 Existing BMC of Asset Management Property

(Source: data that has been processed)

The following is an analysis of the existing BMC for Property Asset Management at PT PLN (Persero) UID Banten:

1. Key Partners

In terms of partnerships in the existing BMC for idle asset management activities in the form of Land and Buildings. External parties that play a role in supporting management are as follows:

- **Property Agents:** Property agents utilize their network and expertise to speed up the rental process, reduce waiting times, and help find suitable tenants.
- **Local Community:** The local community contributes to creating a safe and comfortable environment, enhancing the attractiveness of the property, as well as supporting the stability of the rental environment.
- **PLN Legal Division:** PLN's legal division ensures the legality of the lease relationship by preparing legal documents, ensuring agreement compliance with regulations, and handling potential disputes.

2. Key Activities

To ensure that the property is rented out efficiently, safely, and according to the needs of the tenant and PLN, the following key activities are carried out by PT PLN (Persero) UID Banten when renting out property:

- **Marketing** : The property marketing strategy is still done offline to attract prospective tenants.
- **Tenant Selection:** The selection process includes background checks, identity verification, and payment history checks to ensure prospective tenants meet the criteria, minimize risk, and maintain the suitability of the property for the tenant.
- **Negotiation and Signature of agreement:** Negotiations cover duration, costs, maintenance responsibilities, and agreed facilities to guarantee benefits for both parties before signing the agreement.
- **Asset and Covenant Management:** Includes managing payments, monitoring and evaluating agreements, handling complaints, and addressing maintenance issues to ensure the property is well managed.

3. Value Propositions

Components that explain the advantages and benefits offered to prospective tenants and differentiate these services from other competitors. The following are the value propositions in leasing property assets at PT PLN (Persero) UID Banten:

- **Strategic Asset Location:** The property is located in a strategic area with easy access to public transportation, shopping centres, offices, and schools.
- **Flexible rental options:** Offer monthly, annual, or renewal lease options to suit the needs of tenants, such as agency workers or short-term tenants.

- Competitive pricing: Rental rates are lower than market rates with cost transparency to create a sense of security in transactions.
- Safe and secure environment: The property is located in a safe and secure place with CCTV and restricted access.
- Property Management is done professionally: Properties are professionally managed, including maintenance services, complaint handling, and administrative support, ensuring that property conditions remain optimal and tenants are comfortable.

4. Customer Relationships

- Provide proactive customer service: The property asset team actively monitors property conditions, provides maintenance-related information, and ensures facilities are in the best possible condition.
- Open communication and Payment are made directly to PLN's account: Provide clear communication channels for complaints and inquiries, and process payments directly into PLN accounts to increase trust.
- Educate about PLN's lease rules and policies: Provide complete information on lease rules, property policies, and facility usage guidelines to prevent potential problems in the future.

5. Channels

- Offline advertising: the publication carried out still uses banner advertisements displayed on the front page of the Asset along with contacts that can be contacted.
- Referrals: Existing tenants or customers to recommend the property to others, to get new tenants through testimonials or direct referrals from parties who already have a positive experience.

6. Customer Segments

Includes various groups that have different needs related to property use. segments in PLN UID Banten are divided as follows:

- Migrating employees: PLN employees who are not stationed in their home base
- MSMES: A market segment for start-ups who need a space to grow their business for a short period of time and affordably.
- Individual/Family Tenants: Market segment for non-electricity workers and small families who need a house located around the City Centre but have wide access to the city.
- SOEs or other companies: leasing assets for ATMs

7. Cost Structure

The cost structure includes various expenses required to manage Property Assets. The cost structure includes:

- Maintenance and Renovation Costs

- Environmental and Security Fees
 - Tax
 - Labour and Operating Costs
8. Revenue Streams

Sources of income derived from asset leasing activities at PT PLN (Persero) UID Banten, among others:

- Rental Income either on a monthly or annual basis
- Potential Rental income from penalty fees and or cancellation of agreements
- Potential income from maintenance costs that are routinely incurred by PLN, become costs borne by the Asset tenant.

Existing BMC SWOT Analysis

After the BMC analysis, the research continued by using SWOT analysis to identify and evaluate various aspects from internal and external to develop strategies. The data analysis used primary data sourced from Interviews with resource persons on each BMC column conducted using the SWOT (Strengths, Weaknesses, Opportunities, and Threats) approach, and the results are as follows:

1. Key Partners

The results of the interviews show some important points as follows:

Strengths: All three interviewees agreed that the partners' extensive networks increased the likelihood of a deal.

Weakness: The fees offered by potential partners are quite high and have not been accommodated in the agreement.

Opportunity: There is potential with new partners with innovations in technology.

Threats: The cooperation carried out has gone through the stages of Risk and Legal studies

2. Key Activities

The results of the interviews showed some important points as follows:

Strengths: PLN has an SOP in conducting Asset management.

Weakness: PLN needs to review the contracts that have been made against the time period and market price.

Opportunity: The use of technology can increase the effectiveness of asset management

Threats: External regulations and policies may affect asset management

3. Key Resources

The results of the interviews showed some important points as follows:

Strengths: Key Resources that need to be owned in managing property assets include Land

Building Assets, Human Resources, and Finance

Weakness: The limitations faced by PLN are the condition of aged assets and the need for a budget to restore their original function.

Opportunity: Technology can be used to improve effectiveness and efficiency in managing property assets.

Threats: Economic changes are a threat that disrupts the availability of resources thereby increasing operational costs that affect the balance of demand and supply.

4. Value Proposition

The results of the interviews showed some important points as follows:

Strengths: PLN has a strong customer focus in its asset management.

Weakness: All three interviewees emphasized the importance of building good customer relationships through the use of technology, internal company development, and transparent communication. However, key challenges include lack of personalization of technology, limited resources, and ineffective communication. This shows the need for a balance between technology strategy, transparency, and understanding customer behaviour.

Opportunity: All three interviewees pointed out that customer-driven innovation is critical for business growth. Customer-driven innovations, such as loyalty programs, payment flexibility, and technology-based applications, can improve customer experience and open up new market opportunities by understanding customers' technical and emotional needs.

Threats: Competitors that succeed in creating relevant value through focusing on specific market segments, meeting customer needs, and establishing personal relationships are likely to have an advantage.

5. Cost Structure

The results of the interviews showed some important points as follows:

Strengths: The main cost components that affect property asset management include maintenance and operational costs.

Weakness: Budget constraints affect the quality of property assets to be utilized, which will have an impact on rental prices.

Opportunity: There are opportunities for cooperation with revenue sharing models, BOT, to overcome budget constraints.

Threats: Regulations issued by the Government will affect the policy direction that will be accepted by PLN.

6. Revenue Stream

The results of the interviews showed some important points as follows:

Strengths: The main source of revenue for usability assets is the rental price of usability assets, in addition to this, indirect revenue can be in the form of benefits from cost reduction.

Weakness: The company addresses the potential loss of revenue from less desirable or sub-optimal assets by entering into compensatory leasing schemes or making attractive offers such as additional services.

Opportunity: There is an opportunity to increase revenue through additional services such as adding home charging facilities to form an electric ecosystem.

Threats: In the face of change PLN sees it as an opportunity by creating new revenue from asset management with different business ideas.

7. Channels

The results of the interviews showed some important points as follows:

Strengths: Businesses can build more personalized relationships with customers through an omni-channel approach, focus on social media, quick response, and relevant communication to ensure flexibility and consistency of customer experience.

Weakness: To provide a more integrated experience, the Company can increase communication intensity, improve response speed, and adopt an omni-channel approach.

Opportunity: Utilizing digital platforms can help companies meet customer needs, increase satisfaction, and maintain competitiveness with effective communication, fast service, and proactive solutions (Novani et al., 2023).

Threats: Companies must adapt to changing regulations, technologies, and customer preferences by utilizing digital platforms, interactive content, and new technologies to remain relevant and attractive to the market.

8. Customer Relationship

The results of the interviews showed some important points as follows:

Strengths: Technology that supports efficiency and personalized customer service features can significantly increase customer trust and satisfaction.

Weakness: The company needs to focus on service consistency, communication responsiveness, and adaptability to customer needs to maintain competitiveness and customer loyalty.

Opportunity: Utilizing technologies such as complaint apps, real-time communication, and AR/VR can create a more efficient and satisfying customer experience through more personalized interactions and clear information.

Threats: Companies must be flexible and ready to face changes with careful planning, providing relevant service updates to meet evolving customer needs.

9. Customer Segments

The results of the interviews showed some important points as follows:

Strengths: Companies must customize their strategies and sales of goods and services to meet the unique needs of each market segment.

Weakness: The company should focus on the technology, flexibility, and digital services

segments accessed by Generation Z, millennials, and start-ups and remote businesses.

Opportunity: The trend of digitalization, co-working, and co-living opens up great opportunities to reach freelancers, millennials, and Gen Z. The use of automation and smart home can attract customers who prioritize technological convenience and efficiency.

Threats: Competitors that are more innovative in technology and digital platforms have an edge in attracting young customers. Companies must increase their adoption of technology, digital channels, and innovation to compete and avoid losing market share among tech-savvy customers.

SWOT Analysis and TOWS Matrix

The results of the SWOT analysis were used to determine the strengths, weaknesses, opportunities, and threats in asset management and optimization. Then the results are processed in the TOWS Matrix to create a more specific asset optimization strategy. To take advantage of market opportunities, the SO (Strengths - Opportunity) Strategy utilizes the strengths of existing assets, such as developing assets with high added value. The WO (Weakness - Opportunity) strategy concentrates on improving management capabilities through employee training and the use of advanced technology. The ST (Strengths - Threats) strategy seeks to reduce the impact of threats by leveraging organizational strengths, such as strengthening distribution networks, and finally the WT (Weaknesses-Threats) strategy emphasizes how important it is to reduce risks by diversifying assets and implementing strict maintenance protocols. This method helps asset optimization by ensuring the efficient use and sustainability of assets in the long term (Kurniasih, 2021; Ciptono et al., 2023). Each TOWS matrix of each Business Model Canvas (BMC) block is presented in the table below.

Table 3 Key Partners TOWS Matrix

S	W	O	T
All three interviewees agreed that a partner's extensive network can increase the likelihood of a deal being struck.	The fees offered by potential partners are quite high and have not been accommodated in the agreement.	there is potential with new partners with innovations in the field of technology	The cooperation carried out has gone through the stages of Risk and Legal studies

(Source: processed data)

- SO Strategy : Develop an exclusive cooperation program that prioritizes added value to partners through technological innovation.
- ST Strategy : To ensure partner compliance with the agreement, use technology-based monitoring system.
- WO Strategy : Evaluate the cost structure of cooperation to find the most efficient way of meeting new partner costs while maintaining the potential for innovation.
- WT Strategy : Develop a more regular cooperation agreement with clear provisions on partner fees and liability

Law.

Table 4 TOWS Matrix Key Activities

S	W	O	T
PLN has an SOP in carrying out Asset management	PLN needs to review the contracts that have been carried out for the term and market price.	The use of technology can increase the effectiveness of asset management	external regulations and policies may affect asset management

(Source: processed data)

SO Strategy : PLN's asset management SOPs must be integrated with the latest technology to improve operational efficiency and consistency. Digitalization of SOPs enables real-time monitoring of asset management, which accelerates decision-making.

ST Strategy : Evaluate and develop SOPs in accordance with the latest policy and regulatory changes by involving the Compliance, Legal and Risk Teams.

WO Strategy : Develop a digital platform for contract integration and contract review that includes automatic updates based on analytical data such as term and market price.

WT Strategy : Involve legal and regulatory teams in the contract review process to prevent conflicts with external policies.

Table 5 TOWS Matrix Key Resources

S	W	O	T
Key Resources that need to be owned in managing property assets include Land Building Assets, Human Resources, and Finance	The limitations faced by PLN are the condition of aged assets and the need for a budget to restore their original function.	Technology can be used to improve effectiveness and efficiency in managing property assets.	Economic change is a threat that disrupts the availability of resources, increasing operational costs that affect the supply and demand balance.

(Source: processed data)

SO Strategy : Use digital-based property management technology to maximize the benefits of land and building assets.

ST Strategy : HR training and optimize property assets located in strategic positions.

WO Strategy : -

WT Strategy : Engage strategic partners in technology provision with cooperation schemes to reduce pressure on internal budgets.

Table 6 TOWS Value Propositions Matrix

S	W	O	T
related to Asset Management that is carried out, PLN focuses on Customers.	All three statements emphasize how important it is to build good relationships with customers through the use of technology, internal company development, and transparent communication. However, impersonal implementation of technology, lack of resources, and ineffective	These three statements show that customer-driven innovation is critical for business growth. Companies can improve customer experience while opening up new market opportunities by offering services such as loyalty programs, payment flexibility, and app-based technology. This shows that	existing, and competitors who succeed in creating relevant value through focusing on specific market segments, meeting customer needs, and establishing personal relationships are

	communication are major problems. This shows that it is not only the technology strategy that determines the success of the company, but also good customer behaviour and transparency.	knowing the technological and emotional needs of customers is an opportunity for success.	likely to have an edge.
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(Source: processed data)

SO Strategy : Create a customer-based approach and utilize app-based digital channels to facilitate communication.

ST Strategy : Focus on personalizing services to create added value that competitors cannot replicate and reduce the risk of losing clients to competitors.

WO Strategy : Combine customer data to improve technology personalization and make app-based innovations more suitable to customer needs and improve customer experience with a transparent omnichannel strategy.

WT Strategy : Improve customer relationship with Know Your Customer (KYC) principle.

Table 7 Customer Relationship TOWS Matrix

S	W	O	T
Companies must ensure that technology supports convenience and efficiency while personal interactions increase customer trust and satisfaction. with technology-based customer service features with personalization can add significant value.	Companies should concentrate on service consistency, communication responsiveness, and the ability to adapt to changing customer needs. By addressing these challenges, companies can maintain competitiveness in the market while maintaining customer trust and loyalty.	A more efficient and satisfying customer experience can be created by combining various technology platforms, such as complaint apps, real-time communication, and AR/VR. Companies can use these technologies to enhance more personalized interactions and provide clearer information.	Companies must have careful and flexible planning to adjust to changes expected by customers. Responding to customers' changing needs and providing relevant service updates are important

(Source: processed data)

SO Strategy : To improve customer experience, integrate app-based technologies and digital platforms and develop technology-based loyalty programs that manage interactions based on customer preferences.

ST Strategy : Create a service development plan supported by Digital technology to provide gradual updates by maintaining customer trust despite major changes.

WO Strategy : Provide HR training to implementers and ensure staff are able to use various technology platforms to provide a consistent and satisfying customer experience.

WT Strategy : Companies can make relevant and responsive service updates by using customer data analytics to predict emerging needs.

Table 8 Channels TOWS Matrix

S	W	O	T
To build stronger and more personalized relationships with customers, businesses can use an omni-channel approach and focus on social media as a key channel to ensure flexibility and consistency in the	To provide a more integrated experience, the Company may increase the intensity of communication, improve	Companies can better meet customer needs, improve customer satisfaction, and maintain their competitiveness in the internet age by using	Companies must adapt to changes in regulations, technology, and customer preferences to win the attention of customers in the modern era. Publication strategies should focus on

customer experience. By using quick response and relevant communication, businesses can achieve this goal.	the speed of response, and adopt an omni-channel approach.	digital platforms, an essential strategy for effective communication, prompt service, and proactive solutions (Muhamad et al., 2021).	the use of digital platforms, interactive content creation, and the use of new technologies to stay relevant and attractive in the eyes of the target market.
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(Source: processed data)

- SO Strategy : To create an integrated customer experience, use an omni-channel approach that incorporates digital platforms such as social media, mobile apps and web services.
- ST Strategy : Engage customers to provide feedback through digital communication channels and provide responsive communication.
- WO Strategy : Increase the intensity of communication by utilizing omnichannel or digital means of communication and provide training to the Team regarding Digital communication.
- WT Strategy : Adapt strategies by monitoring trends regularly.

Table 9 Customer Segments TOWS Matrix

S	W	O	T
Companies must customize their strategies and sales of goods and services to meet the unique needs of each market segment.	To capitalize on the market opportunity, companies should concentrate on segments that are engaged in technology, flexibility, and digital services. Generation Z, millennials, as well as start-ups and remote businesses need accessible digital services that utilize the latest technology.	Companies can effectively reach out to this market segment as the trends of digitalization, co-working, and co-living create significant market opportunities, especially among freelancers, millennials, and the Z generation. Incorporating automation and smart home in the sale of goods and services will increase the appeal to customers who prioritize convenience, efficiency, and technological ease.	Competitors that better utilize digital technologies and platforms, and aggressively leverage social media, have an edge in attracting young and professional customers (Muhamad et al., 2021). Companies must continue to compete by increasing their use of digital channels, adopting new technologies, and continuously innovating to increase their added value. Businesses risk losing customers and market share, especially among the more tech-savvy Gen Z and millennials, if they do not quickly adjust to these trends.

(Source: processed data)

- SO Strategy : Utilize the trend of digitalization to create goods or services that suit the needs of the younger generation who prioritize innovation and convenience.
- ST Strategy Enhance the ability of the business to adapt to the needs of young customers by changing digital platforms and technologies.
- WO Strategy : Conduct Market Research to understand the needs of freelancers, start-ups, and remote businesses so you can offer more customized services.
- WT Strategy Reach out to a wider market segment, use collaboration strategies with technology communities or digital platforms.

Table 10 TOWS Cost Structure Matrix

S	W	O	T
the main cost components that affect the management of	Budget constraints affect the quality of property assets that will be utilized, which	there are opportunities for cooperation with revenue	Regulations issued by the Government will affect the

property assets include maintenance costs and operating costs.	will have an impact on rental prices.	sharing models, BOT, to overcome budget limitations	policy direction that will be accepted by PLN.
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(Source: processed data)

SO Strategy : Optimizing maintenance and operational costs through cooperation opportunities based on the Revenue Sharing model, also known as BOT (Build-Operate-Transfer), can reduce the direct budget burden.

ST Strategy Collaborate with partners who understand government policy and can help manage the effects of regulation.

WO Strategy Improve the quality of property assets and overcome budget constraints by using Revenue Sharing and BOT (Build-Operate-Transfer) models.

WT Strategy : -

Table 11 Revenue Stream TOWS Matrix

S	W	O	T
The main source of income for a usable asset is the rental price of the usable asset, in addition to this, indirect income can be in the form of benefits from cost reduction.	The Company addresses the potential loss of revenue from less desirable or sub-optimal assets by entering into compensatory leasing schemes or making attractive offers such as additional services.	there is an opportunity to increase revenue through additional services such as adding home charging facilities to form an electric ecosystem.	in the face of change PLN sees this as an opportunity by creating new revenue from asset management with different business ideas.

(Source: processed data)

SO Strategy : Combine the development of technology-based services with asset leasing strategies to improve customer experience and increase electricity ecosystem revenue.

ST Strategy : To support new business ideas that match market trends and needs, focus on assets that have high profit potential.

WO Strategy : Utilize additional service opportunities to attract tenants and reduce revenue loss.

WT Strategy : To stay competitive and compete in the market, provide fewer desirable assets in an attractive way, such as discounts or exclusive additional services.

The TOWS matrix obtained from the analysis of the 9 BMC boxes is compiled into 1 matrix so that the similarity of the formulated strategies can be seen through the table below.

Table 12 Comparison of TOWS Matrix

		STRENGTHS	WEAKNESS
		SO Strategy	WO Strategy
OPPORTUNITY	1	Key Partners: Develop exclusive cooperation programs with partners through technological innovation.	-

	2	Key Activities: Digitalization of SOPs for real-time monitoring of asset management to assist in decision making.	-
	3	Key Resources: Use digital-based property management technology to maximize the benefits of land and building assets.	-
	4	Value Proposition: Improve services by increasing the ease of communication through digital technology media and based on customer needs.	Value Proposition: Combining customer data to improve technology personalization and make app-based innovations more suitable to customer needs and improve customer experience with a transparent omnichannel strategy.
	5	Customer Relationships: Develop a loyalty program on the digital platform den provide several service packages based on customer preferences.	Customer Relationships: Offer flexibility in payment patterns and/or discount packages to loyal customers who have contracted for a certain period of time.
	6	Channels: Integrate the digital platform system owned (Omnichannel).	Channels: Increase the intensity of communication by utilizing omnichannel or digital means of communication and provide training to the Team regarding Digital communication.
	7	Customer Segments: Utilize the trend of digitalization to create goods or services that suit the needs of the younger generation who prioritize innovation and convenience.	Customer Segments: Conduct Market Research to understand the needs of freelancers, start-ups, and remote businesses so you can offer more customized services.
	8	Cost Structure: Optimizing maintenance and operational costs through cooperation opportunities based on the Revenue Sharing model, also known as BOT (Build-Operate-Transfer), can reduce the direct budget burden.	-
	9	Revenue Stream: Combine technology-driven service development with asset leasing strategies to improve customer experience and increase electricity ecosystem revenue.	-
		ST Strategy	WT Strategy
THREATS	1	Key Partners: Increase partners and variety of services such as electricity ecosystem and Government.	-
	2	Key Activities: Review cooperation contracts with partners.	-
	3	-	-
	4	Value Propositions: Focus on key service types (Digitalization of Asset Usability system and Electricity Ecosystem) to create added value that cannot be replicated by competitors and reduce the risk of losing clients to competitors.	-
	5	Customer Relationships: Offer flexibility in payment patterns and/or discount packages to loyal customers who have contracted for a certain period of time.	Customer Relationship: Companies can make relevant and responsive service updates by using customer data analytics to predict emerging needs.

	6	Channels: Collaborate with digital property services and conduct digital marketing with partner-owned channels (Prasetio et al., 2022).	-
	7	Customer Segments: Focusing on specific customer segments and maximizing parallel services improves the business's ability to adapt to the needs of young customers by changing digital platforms and technologies.	Customer Segments: Reach out to broader market segments, use community collaboration strategies.
	8	-	-
	9	Revenue Stream: To support new business ideas that match market trends and needs, focus on assets that have high profit potential.	Revenue Stream: optimize services on less desirable assets in an attractive way, such as discounts or exclusive additional services.

The TOWS matrix in table 27 forms a compilation of strategies totalling 9 SO Strategies, 7 ST Strategies, 4 WO Strategies and 3 WT Strategies. among these strategies there are several similarities in narrative and strategy concepts so that simplification can be made through the table below.

Table 13 Strategy Simplification

	BMC TOWS STRATEGY	STRATEGY SIMPLIFICATION
	Key Partners	
SO1	Key Partners: Develop exclusive cooperation programs with partners through technological innovation.	Develop exclusive cooperation programs with partners through technological innovation.
ST1	Key Partners: Increase partners and variety of services such as electricity ecosystem and Government.	Adding partners and variety of services such as electricity and government ecosystems.
	Key Activities	
SO2	Key Activities: Digitalization of SOPs for real-time monitoring of asset management to assist in decision making.	Digitalization of SOPs for real-time monitoring of asset management to assist in decision-making.
ST2	Key Activities: Review cooperation contracts with partners.	Review cooperation contracts with partners.
	Key Resources	
SO3	Key Resources: Use digital-based property management technology to maximize the benefits of land and building assets.	Using digital-based property management technology to maximize the benefits of land and building assets
	Value Proposition	
SO4	Value Proposition: Improve services by increasing the ease of communication through digital technology media and based on customer needs.	Improve services by increasing ease of communication through digital technology media and based on customer needs.
ST3	Value Proposition: Improve services by increasing the ease of communication through digital technology media and based on customer needs.	
WO1	Value Proposition: Combining customer data to improve technology personalization and make app-based innovations more suitable to customer needs and improve customer experience with a transparent omnichannel strategy.	Combining customer data to improve technology personalization and make app-based innovations more suitable to customer needs and improve customer experience with a transparent omnichannel strategy.
	Customer Relationship	

SO5	Customer Relationships: Develop a loyalty program on the digital platform den provide several service packages based on customer preferences.	Customer service innovations in the form of loyalty programs and offering flexible payment patterns and or discount packages to loyal customers and lease contracts for a certain period of time.
ST4	Customer Relationships: Offer flexibility in payment patterns and/or discount packages to loyal customers who have contracted for a certain period of time.	
WO2	Customer Relationships: Offer flexibility in payment patterns and/or discount packages to loyal customers who have contracted for a certain period of time.	
WT1	Customer Relationship: Companies can make relevant and responsive service updates by using customer data analytics to predict emerging needs.	
	Channels	
SO6	Channels: Integrate the digital platform system owned (Omnichannel).	Collaborate with partners and create omnichannel service integration for digital marketing
ST5	Channels: Collaborate with digital property services and conduct digital marketing with partner-owned channels.	
WO3	Channels: Increase the intensity of communication by utilizing omnichannel or digital means of communication and provide training to the Team regarding Digital communication.	
	Customer Segments	
SO7	Customer Segments: Leverage the trend of digitalization to create goods or services that suit the needs of the younger generation who prioritize innovation and convenience.	Take advantage of the digitalization trend to focus on the market share of the younger generation, start-up companies and young couples by providing innovative digital services.
ST6	Customer Segments: Focusing on specific customer segments and maximizing parallel services improves the business's ability to adapt to the needs of young customers by changing digital platforms and technologies.	
WO4	Customer Segments: Conduct Market Research to understand the needs of freelancers, start-ups, and remote businesses so you can offer more customized services.	
WT2	Customer Segments: Reach out to broader market segments, use community collaboration strategies.	
	Cost Structure	
SO8	Cost Structure: Optimizing maintenance and operational costs through cooperation opportunities based on the Revenue Sharing model, also known as BOT (Build-Operate-Transfer), can reduce the direct budget burden.	Establish cooperation patterns based on Revenue Sharing or Build Operate Transfer (BOT) models to partners and potential partners.
	Revenue Stream	
SO9	Revenue Stream: Combine technology-driven service development with asset leasing strategies to improve customer experience and increase electricity ecosystem revenue.	Develop services with a combination of Usability and Electricity Ecosystem on strategically located assets

ST7	Revenue Stream: To support new business ideas that match market trends and needs, focus on assets that have high profit potential.	
WT3	Revenue Stream: optimize services on less desirable assets in an attractive way, such as discounts or exclusive additional services.	Rebranding the location with thematic tourism concepts such as community spaces, educational parks or museums so as to encourage local MSMEs to join in empowering the location.

Through the simplification of similar strategies from the TOWS matrix contained in Table 28 Simplified Strategies, 13 main strategies were obtained as follows:

- 1) Develop exclusive cooperation programs with partners through technological innovation.
- 2) Adding partners and variety of services such as electricity and government ecosystems.
- 3) Digitalization of SOPs for real-time monitoring of asset management to assist in decision-making.
- 4) Review cooperation contracts with partners.
- 5) Using digital-based property management technology to maximize the benefits of land and building assets
- 6) Improve services by increasing ease of communication through digital technology media and based on customer needs.
- 7) Combining customer data to improve technology personalization and make app-based innovations more suitable to customer needs and improve customer experience with a transparent omnichannel strategy.
- 8) Customer service innovations in the form of loyalty programs and offering flexible payment patterns and or discount packages to loyal customers and lease contracts for a certain period of time.
- 9) Collaborate with partners and create omnichannel service integration for digital marketing
- 10) Take advantage of the digitalization trend to focus on the market share of the younger generation, start-up companies and young couples by providing innovative digital services.
- 11) Establish cooperation patterns based on Revenue Sharing or Build Operate Transfer (BOT) models to partners and potential partners.
- 12) Develop services with a combination of Usability and Power Ecosystem on strategically located assets
- 13) Rebranding the location with thematic tourism concepts such as community spaces, educational parks or museums to encourage local MSMEs to join in empowering the location.

Based on the analysis, TOWS and SWOT matrices are combined in a strategic context to offer a clear direction for asset optimization.

Business Model Canvas (BMC) Recommendations

Developing a strategy based on the BMC model means building a system consisting of its interconnected subsystems. The 13 strategies based on the SWOT framework and TOWS matrix are integrated with the existing Business Model Canvas to form a new Business Model Canvas (BMC) which is recommended as follows.

Table 14 Business Model Canvas Recommendations

Key Partners	Key Activities	Value Propositions	Customer Relationship	Customer Segments
1. Property Agent 2. Local Community 3. PLN Legal Division 4. Develop exclusive cooperation programs with partners through technological innovation. 5. Adding partners and various types of services such as electricity ecosystem and Government.	1. Marketing 2. Tenant Selection 3. Negotiation and signing 4. Asset Management and Agreement 5. Digitization of SOPs for real-time monitoring of asset management to assist in decision making. 6. Reviewing cooperation contracts with partners.	1. Strategic location of the Assets and easy access to various public facilities 2. Flexible lease options, monthly, yearly 3. Competitive price 4. Safe and comfortable environment 5. Property management is done professionally 6. Improve services by increasing ease of communication through digital technology media and based on customer needs. 7. Combining customer data to improve technology personalization and make application-based innovations more in line with customer needs and improve customer experience with transparent omnichannel strategies.	1. Provide proactive customer service 2. Open communication and Payment are made directly to PLN's account. 3. Educate about PLN rental rules and policies 4. Customer service innovations in the form of loyalty programs and offering flexible payment patterns and or discount packages to loyal customers and lease contracts for a certain period of time.	1. Employees who migrate 2. MSMEs 3. Individual/Family Tenants 4. Other SOEs 5. Take advantage of the digitalization trend to focus on the market share of the younger generation, Start-up companies and young couples by providing innovative digital services.
	Key Resources		Channels	
	1. Property Assets, Legal Team, Market Data & Information, Cleaning and security labour. 2. Using digital-based property management technology to maximize the benefits of land and building assets		1. Offline Advertising 2. Referral 3. Collaborate with partners and integrate services into an omnichannel for digital marketing	
Cost Structure			Revenue Streams	
1. Maintenance and Renovation Costs 2. Neighbourhood and Security Fees 3. Taxes 4. Labour and Operating Costs 5. Establish a cooperation pattern based on the Revenue Sharing or Build Operate Transfer (BOT) model to partners and potential partners. 6. Server Service Fee			1. Monthly or Annual Rental Income 2. Penalty or cancellation fee income 3. Maintenance fee borne by the tenant 4. Develop services with a combination of Usability and Electrical Ecosystem in strategically located assets. 5. Rebranding the location with thematic tourism concepts such as community spaces, educational parks or museums so as to encourage the interest of local MSMEs to join in empowering the location.	

(Source: processed data)

Thus, with this new Business Model Canvas (BMC), the company PT PLN UID Banten already has a clear road map to achieve its business goals. The next step is to implement this strategy carefully and consistently. It is important to conduct regular monitoring and evaluation to ensure that the strategies that have been designed are running according to plan and producing the expected results.

4. CONCLUSIONS

By analysing through research, there are several things that can be drawn as conclusions as follows:

1. Based on the Business Model Canvas (BMC) analysis conducted, the existing BMC contained in the property asset management business process falls into the resource-driven Business Model Canvas category.

a) Key Resources are idle property assets, market data and information, skilled human resources in legal, risk, technology and management,

b) Key Activities carried out using offline marketing.

c) Key Partners in the existing BMC are Property Agents, Local Communities and PLN's legal department.

d) The Value Proposition is that the location is strategic and provides flexible lease options.

e) Existing Customer Segments are PLN employees who migrate, SOEs and MSMEs.

f) Customer Relationship in the form of proactive communication and transparent transactions.

g) Channels used in the existing BMC are still conventional means of communication, namely offline advertising and referrals.

h) Cost Structure in the existing BMC in the form of building maintenance costs, renovations, dues and taxes.

i) Revenue Streams in the existing BMC are in the form of rental income, penalty fees and benefit calculations in the form of maintenance costs borne by tenants.

2. SWOT analysis can assist companies in analysing Strengths, Weaknesses, Opportunities, and Threats, in each BMC block that can be used to expand business value and implement strategies that are adaptive to each BMC element. By doing this, the combination of SWOT Analysis and BMC can help companies create, implement appropriate strategies and have competitiveness.

3. Through the research that has been conducted, SWOT analysis reveals internal factors (Strength and Weakness) and External factors (Opportunity and Threats) that affect PLN UID Banten in carrying out asset management. Based on the TOWS matrix, 23 strategies were produced, and after being organized and grouped, 13 strategies were collected to be implemented by management. To maintain competitive advantage, the New BMC is proposed

as the new business compass strategy after the 13 strategies are incorporated into the existing BMC.

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