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Strategy for Optimizing *Idle* Land to Increase Non-Aeronautical Revenue: A SWOT and VRIO Approach

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ABSTRACT: The decline in air traffic at Adisutjipto Airport, Yogyakarta, following the opening of Yogyakarta International Airport calls for revenue sources that do not depend on passenger volume. This study analyzes the existing condition of *idle* land, the internal and external factors influencing its optimization, and the company's resource advantages, and then formulates a strategy for optimizing *idle* land to increase non-aeronautical revenue. A descriptive qualitative approach was employed in a single case study of the 4,945 m² Babarsari *idle* land owned by PT Angkasa Pura Indonesia, Adisutjipto Yogyakarta Branch Office. Primary data were obtained through semi-structured interviews with nine purposively selected informants; secondary data came from the partner selection document and the *highest and best use* (HBU) study. The data were analyzed through reduction, display, and conclusion drawing using weighted strengths, weaknesses, opportunities, and threats (SWOT) analysis, value, rarity, imitability, and organization (VRIO) analysis, and a value creation assessment. Data trustworthiness was tested through triangulation, *member checking*, and an *audit trail*. The results show that the land has clean and clear legal status, that the company's strategic position lies in SWOT Quadrant I (+0.88; +1.68), and that four of the six resources generate sustained competitive advantage. Corporate reputation and the stakeholder network have not yet been utilized because organizational readiness, particularly specific regulations for land outside the Airport Master Plan (AMP) and communication with the community, is still being developed. The sports center alternative with integrated commercial facilities ranks highest on four of the five value creation indicators, although its net present value is lower than that of office space. These findings indicate that strategy selection depends not only on financial performance but also on organizational readiness and stakeholder relationships. Actual revenue realization will be evaluated once the business activities are in operation. The study recommends strengthening internal regulations, accelerating the cooperation process, and developing an asset utilization strategy that considers economic potential, implementation readiness, and business sustainability.

KEYWORDS: *idle* land, non-aeronautical revenue, SWOT, VRIO, value creation

INTRODUCTION

The airport industry has shifted its business model from a transportation infrastructure provider to a commercial entity that supports regional economic growth (Graham, 2018). Airport revenue consists of aeronautical revenue, which is derived from aviation services such as aircraft landing, parking, and storage as well as passenger and cargo services, and non-aeronautical revenue, which originates from non-aviation activities such as space rental, concessions, advertising, parking, and property development. Airports Council International (2025) reported that non-aeronautical revenue accounted for approximately 36.7% of total airport revenue overall in 2023, so its role in the financial sustainability of airport operators is increasingly decisive. A study in Tanzania showed that rental, parking, and advertising revenues contribute positively to the improvement of airport facilities (Maziku & Bankwa, 2024).

Land is one of the assets that can be converted into a source of non-aeronautical revenue. The aerotropolis concept views the airport as a hub of economic activity integrated with commercial, logistics, and property activities (Kasarda & Lindsay, 2011). Messer (2012) showed that airport operators have several land development options, ranging from land leasing to direct involvement in property development, each with different risks and returns. In practice, however, some *idle* land has not yet been utilized optimally and therefore does not contribute to the company's financial performance.

This phenomenon is evident at PT Angkasa Pura Indonesia, a state-owned enterprise formed by the merger of PT Angkasa Pura I and PT Angkasa Pura II in September 2024, which manages 35 airports and two joint venture airports. One of its branch offices, Adisutjipto Airport in Yogyakarta, has experienced a sharp decline in commercial flight activity since Yogyakarta International Airport (YIA) began operating in 2020. YIA serves routes operated entirely by Boeing-type aircraft, whereas Adisutjipto serves

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only a limited number of routes operated by ATR 72 aircraft. This condition has put pressure on aeronautical revenue and underscores the need for alternative revenue sources that do not depend on traffic. One available option is *idle* land outside the Airport Master Plan (AMP), including a 4,945 m² parcel on Jalan Babarsari, Sleman Regency.

The literature points in two directions. Handayani et al. (2023) found that non-aeronautical revenue at Indonesian airports is influenced by facilities, passenger traffic, and aeronautical revenue, so its management tends to be passenger-driven. In contrast, Zagrajek (2025) identified several non-aeronautical activities that are entirely independent of passenger traffic and can increase airport resilience to crises. Wang et al. (2025) showed that non-aeronautical revenue performance is also influenced by spatial factors across airports. However, to the authors' knowledge, these studies have not addressed how *idle* land at airports with declining traffic can be optimized as a source of asset-based revenue at the branch-office level.

From a strategic management perspective, asset optimization concerns not only physical utilization but also the organization's ability to create value through the effective management of resources and activities (Porter, 1985; Koller et al., 2020). The resource-based view (RBV) holds that sustained competitive advantage originates from heterogeneous resources that are difficult to transfer between organizations (Wernerfelt, 1984; Barney, 1991; Peteraf, 1993). The VRIO framework (*value, rarity, imitability, organization*) operationalizes this view for assessing resources (Barney & Hesterly, 2015), whereas SWOT analysis (*strengths, weaknesses, opportunities, threats*) maps internal and external factors as a basis for strategy formulation (David et al., 2017). The two tools are commonly used separately: SWOT assesses the fit between strategy and the environment, whereas VRIO assesses the quality of internal resources. Integrating them within a value creation framework allows the formulation of strategies that are aligned with market opportunities and, at the same time, supported by organizational capabilities.

Based on the foregoing, this study aims to (1) analyze the existing condition of the utilization of the Babarsari *idle* land in supporting non-aeronautical revenue, (2) identify the internal and external factors influencing its optimization, (3) assess the company's resource advantages using the VRIO approach, and (4) formulate an *idle* land optimization strategy based on the integration of SWOT, VRIO, and value creation analyses. The theoretical contribution of this study lies in explaining the gap between the quality of strategic resources and the organization's capacity to convert them into economic value in the context of airport *idle* land optimization. The integration of SWOT and VRIO analyses shows that owning valuable, rare, and difficult-to-imitate resources does not by itself guarantee optimal utilization when organizational support, particularly the regulation of cooperation specific to land outside the AMP and stakeholder coordination, is still being strengthened. The value creation assessment then helps distinguish development alternatives that are financially superior from those that are more ready to be implemented. Accordingly, this study offers an integrative analytical framework to support context-based asset optimization decisions, while acknowledging the limited generalizability of a single case study.

RESEARCH METHOD

Research Design and Location

This study employed a descriptive qualitative approach with a single case study method and an interpretive paradigm. The qualitative approach was chosen because the study seeks to understand the organization's strategic conditions, resource potential, and value creation processes through the utilization of airport assets as interpreted by the actors involved (Creswell & Poth, 2018). The case study method was chosen because the research focuses on a single unit of analysis, namely the strategy for optimizing *idle* land within the Adisutjipto Airport environment, with the organization and the asset as the context of inquiry, examined in depth within its real-life context (Sekaran & Bougie, 2020). The study was conducted at PT Angkasa Pura Indonesia, Adisutjipto Yogyakarta Branch Office, Sleman Regency, Special Region of Yogyakarta, from April to October 2026, with data collection in August–September 2026. The units of analysis comprised the organization, the *idle* land asset, and the asset optimization strategy.

Informants and Data Sources

Informants were selected using *purposive sampling* based on their authority, direct involvement in the planning or implementation of *idle* land utilization, and understanding of non-aeronautical revenue policy (Creswell & Poth, 2018; Sekaran & Bougie, 2020). External informants were selected because of their connection to investment or to the impact of land development on the community. Nine informants were successfully interviewed (Table 1). Informant identities are anonymized using the codes applied in all quotations in this manuscript.

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Table 1. Characteristics of the research informants

No	Code	Role	Information focus
1	GM	General Manager of the branch office	Strategic policy direction for *idle* land optimization
2	MC	Airport Commercial Department Head	Business opportunities and non-aeronautical revenue development
3	MAL	Manager Asset & Legal (Business Support)	The company's strategic resources (RBV and VRIO)
4	MK	Finance Manager	Financial condition and investment feasibility
5	CO	Commercial Officer	Non-aeronautical business opportunities at the technical level
6	ALO	Asset & Legal Officer	Asset inventory, administration, and land legality
7	INV	Business partner/investor	Investment attractiveness and cooperation potential
8	MS-1	Community leader (hamlet official)	Perceptions and socioeconomic impact
9	MS-2	Community leader (neighborhood association head)	Perceptions and socioeconomic impact

Source: *research data (2026).*

Primary data were collected through semi-structured in-depth interviews and participant observation, with the researcher as the main instrument, assisted by an interview guide and an observation sheet. The interviews were conducted face to face during the data collection period of August–September 2026. All interviews were recorded with the informants' consent, transcribed verbatim, reread to ensure consistency with the recordings, and then coded thematically according to the SWOT and VRIO categories. Quotations in this manuscript are drawn from these transcripts, were translated from Indonesian into English by the authors, and are labeled with informant codes. Field observation was carried out through site visits and the recording of physical conditions on an observation sheet.

Secondary data came from the documents analyzed in Table 2, namely the selection plan document (*dokumen rencana seleksi*, DRS) for cooperation in the utilization of *idle* land, the *Highest and Best Use* (HBU) Study Report for the Babarsari land prepared by a public appraisal firm (*kantor jasa penilai publik*, KJPP) (2025), the management rights (*hak pengelolaan*) certificate, the company's commercial activity guidelines, and regional spatial planning regulations. The documents were read repeatedly, key information was noted, and the information was then compared with the interview results to test consistency across sources.

Table 2. Documents analyzed

Document	Year	Information analyzed	Used for
Selection plan document (DRS) for cooperation in the utilization of *idle* land, package LLB-001	2025	Business activities, term, contribution scheme, and selection requirements	Existing condition, SWOT
HBU Study Report for the Babarsari land (KJPP)	2025	NPV, IRR, payback period, rental value, and development alternatives	Financial feasibility, value creation
Management Rights Certificate (*Hak Pengelolaan*) No. 00009	2004	Title, area, and rights holder	Legality, VRIO
Board of Directors Decree KEP.DU.33/KB.03/2022 on the commercial activity guidelines of PT Angkasa Pura Indonesia	2022	Basis for the company's commercial activities	Analysis of the company's commercial regulations, SWOT

Source: *research data (2026).*

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The researcher is an employee of the company under study; therefore, potential positional bias was controlled through triangulation with external documents, confirmation of the results with informants, documentation of the analytical process, and guidance from the other authors.

Analysis Technique and Data Trustworthiness Testing

Data analysis followed the interactive model consisting of data reduction, data display, and conclusion drawing (Miles et al., 2014). Transcripts and documents were coded into the categories of strengths, weaknesses, opportunities, and threats, as well as the VRIO criteria. Strategic factors were formulated through SWOT analysis and quantified using the *Internal Factor Analysis Summary* (IFAS) and *External Factor Analysis Summary* (EFAS) matrices following Rangkuti (2012) and David et al. (2017). Strategy alternatives were developed using the SWOT matrix (David et al., 2017).

Weighting. Weights (0.00–1.00; summing to 1.00 per group) indicate the relative importance of each factor to the success of land optimization. Their determination considered the relevance of each factor to the optimization objectives and its frequency of occurrence, that is, the number of informants and documents mentioning the factor.

Rating. Ratings of 1–4 follow the scale commonly used in IFAS and EFAS matrices (Rangkuti, 2012; David et al., 2017), with operational adjustments by the researcher, as detailed in Table 3. Ratings were determined from frequency, namely the distribution of sources mentioning the factor, and intensity, namely how strongly informants affirmed the influence of the factor, in the triangulated data. For weaknesses and threats, a higher rating indicates greater urgency; therefore, the scores of these two groups are subtracted from the scores of strengths and opportunities when determining the quadrant position.

Table 3. Guidelines for rating strategic factors

Rating	Frequency	Intensity
4	Mentioned by most informants from more than one group (internal and external) and supported by documents	Affirmed as the main determinant of the success of, or obstacle to, optimization
3	Mentioned by several informants and consistent with documents or across informants	Stated to have a real influence
2	Mentioned by a small number of informants or by only one informant group	Stated to have a limited influence
1	Mentioned by one informant without document support	Stated to have a minor influence

Source: *prepared by the researchers with reference to Rangkuti (2012) and David et al. (2017).*

Assessors and resolution of differences in assessment. The initial weighting and rating were carried out by the researcher based on the transcripts and documents. Each factor was compared with the relevant documents; for example, legality was checked against the certificate and the KJPP report, and cooperation provisions against the selection plan document and the commercial activity guidelines. The results were then reviewed; where differences in assessment arose between sources or between assessors, they were resolved through discussion or reconfirmation, and the final value was determined according to the source with the strongest data support. A factor was included only if it was supported by at least two different sources.

VRIO assessment and value creation. Strategic resources were assessed using the VRIO framework (Barney & Hesterly, 2015), with "yes" or "no" answers for each criterion, accompanied by reasons based on interview and document evidence. Land development alternatives were assessed against five value creation indicators: economic value, asset utilization, investor attractiveness, competitive advantage, and business sustainability. These five indicators are the researchers' operationalization, drawing on the concepts of value creation and competitive advantage (Porter, 1985) and the principles of valuation (Koller et al., 2020), and are not standardized instruments from either source. The high, medium, and low categories constitute an ordinal scale established by the researchers (Table 9) and are presented in matrix form (Miles et al., 2014).

Data trustworthiness. Data trustworthiness was tested through source triangulation (internal informants, external informants, and documents) and technique triangulation (interviews, observation, and documents), *member checking* with informants, and an *audit trail* in the form of records of coding and assessment decisions (Lincoln & Guba, 1985). Because the lead researcher comes from the organization under study, positional reflexivity was maintained through review by the other authors and comparison with external documents.

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RESULTS

Existing Condition of *Idle* Land Utilization

The Babarsari *idle* land is located on Jalan Babarsari, Caturtunggal Village, Depok District, Sleman Regency, with an area of 4,945 m² and title evidenced by Management Rights Certificate (*Hak Pengelolaan*) No. 00009. It is one of three *idle* land parcels outside the AMP owned by the branch office, together with the Demangan land (624 m²), which has been leased to a food and beverage partner, and the Maguwoharjo land (8,040 m²), which is in the partner selection process. According to Sleman Regent Regulation No. 80 of 2023 on the Detailed Spatial Plan (RDTR) of the Central Sleman Area, the land lies in the regional-scale trade and services subzone (K-2), with a building coverage ratio of 60%, a green area ratio of 20%, a floor area ratio of 7.2, and a height limit of 20 m in accordance with the flight operation safety area. The site adjoins government offices, lies on a main road connected to the Solo–Yogyakarta highway, and is surrounded by universities, shopping centers, and densely populated residential areas.

Legal status. All company informants stated that the three parcels have *clean and clear* status, that is, they are certified in the company's name and are not in dispute (GM; MAL; ALO). MAL's statement, "The ownership is legally valid in accordance with the certificate held by PT Angkasa Pura Indonesia (Persero), with *clean and clear* status, so there is no dispute with any party," is consistent with the statements of ALO and INV and was confirmed by the certificate and the independent appraiser's report. Asset inventories are carried out periodically through data review, field visits, and tiered reporting to the head office.

Level of utilization. Before the partner selection process began, the land had not been utilized productively. MS-1, who has lived in the area for more than 40 years, said that the land was "overgrown with grass and shrubs ... and there is no economic activity at all," and MS-2 considered it not yet well maintained despite its potential for business activity. The appraiser's report records an office building of 135 m² and a tower of 110 m² that were leased until December 2025. The company continues to maintain the land through fencing, boundary markers, and routine monitoring (GM; MAL; ALO). At the time of the study, optimization had entered an advanced stage: ALO stated that the process had reached the asset handover minutes, so that the partner could begin construction. The 2025 selection plan document (DRS) (PT Angkasa Pura Indonesia, 2025) designates a *sport center* and supporting *commercial mixed use* facilities as the business activity in selection package LLB-001, through an open selection based on the company's commercial activity guidelines (PT Angkasa Pura I, 2022). The main provisions include a 10-year contract term, extendable once for up to two years if the required service levels are met; a financial contribution in the form of land rent (annual escalation of inflation plus 2%) and/or revenue sharing based on a percentage of turnover or a minimum gross turnover; a business scope covering food and beverage, retail, and services; and a maximum facility installation period of six months. Two prospective partners have submitted letters of intent, and the company has offered the land through direct market sounding and exhibitions (CO).

Highest and best use study results. The HBU study tested three development alternatives, namely office space, a hotel, and a sports center, under a cooperation scheme for utilization (Table 4). All three are financially feasible because their net present value (NPV) is positive and their internal rate of return (IRR) exceeds the weighted average cost of capital (WACC) of 9.89%. Office space yields the highest NPV, whereas the sports center yields the highest IRR and the fastest payback period. The vacant land lease scheme was assessed as feasible but not recommended because it yields a rental value of IDR 411,696,000 per year (IDR 83,255 per m² per year) with an initial capitalization rate of only 0.5%, and thus does not maximize land productivity (KJPP, 2025).

Table 4. Financial feasibility of Babarsari land development alternatives under the cooperation scheme for utilization

Indicator	Office space	Hotel	Sports center
NPV, 10-year scheme (IDR billion)	36.38	15.44	12.61
NPV, 20-year scheme (IDR billion)	36.38	12.46	12.61
IRR, 10-year scheme (%)	11.08	10.57	11.64
IRR, 20-year scheme (%)	11.08	10.73	11.64
Payback period, 10-year scheme (years)	11.28	11.51	9.09
WACC (%)	9.89	9.89	9.89

Source: *Highest and Best Use Study Report for the Babarsari land, KJPP Dino Farid dan Rekan (2025), processed by the authors.*

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The sports center with integrated commercial facilities shows a shorter payback period of 9.09 years, compared with 11.28 years for office space. With an initial cooperation term of 10 years and a possible extension of up to 2 years within the authority of the branch office, the payback period of the sports center option falls within the initial contract term, whereas office space would require an extension for its payback period to be covered within the potential cooperation term. This difference is one of the considerations in assessing the implementation readiness of the two alternatives, while still taking into account the cash flow assumptions, extension provisions, and financial risks of each scheme.

Contribution and constraints. The land optimization target is included in the company's 2026 work plan and budget, continues into 2027, and forms part of the branch office's performance indicators (GM). Revenue from land outside the AMP does not depend on fluctuations in flight traffic (GM; CO; MK). MK emphasized that land that does not yet generate income entails an opportunity cost because an asset with development potential does not yet yield a return. This contribution has not yet been optimized because of three constraints. First, although a board of directors' decree on commercial activities within the company is in place, it does not yet set base rates or a standard cooperation mechanism for *idle* land outside the AMP, so pricing still depends on a KJPP appraisal for each transaction. Second, the cooperation term within the branch office's authority (10 years with a two-year extension) is considered less attractive to investors who calculate long-term break-even points (CO; INV). Third, the administrative process for partner selection is relatively long (INV). From the community's perspective, land that has long remained unoptimized is perceived as giving an unattractive impression to the neighborhood, as a breeding place for mosquitoes and wild animals, and as prone to misuse; nevertheless, both community informants support optimization on the condition that outreach is conducted from the planning stage, community leaders are involved, and micro, small, and medium enterprises (MSMEs) and local labor are accommodated.

Triangulation showed high convergence on five main themes, namely legal status, the unproductive condition of the land, strategic location, investor interest, and the independence of revenue from traffic. No material contradictions were found between the interview data and the official documents. Key informants (GM, MC, MAL, and MK) stated that the summary of findings matched the intent of their answers at the results confirmation stage.

Internal and External Factors: SWOT Analysis

The analysis identified six strengths, five weaknesses, six opportunities, and five threats (Table 5). The main strengths are clean and clear asset legality (S1), strategic location (S2), and a process that has reached the asset handover stage (S6). The most prominent weakness is the absence of specific commercial regulations on rates and cooperation mechanisms for land outside the AMP (W1). The dominant opportunities are a *captive market* in the education area (O1), investor interest confirmed by letters of intent (O3), and lifestyle trends toward *sportainment* and co-working spaces (O2). The greatest threats are fluctuations in economic, social, and political conditions (T1) and the risk of illegal occupation or double claims, which is regarded as a future risk rather than a dispute currently under way (T5).

The weights and ratings in Table 5 were assigned by the researchers based on interview transcripts and documents, using the rating guidelines in Table 3. Each factor was compared with the relevant documents: legality (S1) with the certificate and the KJPP report, cooperation provisions (W1, W2) with the selection plan document and the commercial activity guidelines, and market opportunities (O1–O3) with the HBU report and the letters of intent. Differences in assessment between sources were discussed with informants, and the final value was determined according to the source with the strongest data support. This assessment represents the researchers' evaluation of the available data and is not intended as an evaluation of the performance of any party.

Table 5. IFAS and EFAS matrix for the optimization of the Babarsari *idle* land

Strategic factor	Weight	Rating	Score
Internal factors			
S1 Clean and clear asset legality	0.12	4	0.48
S2 Strategic location on a main road	0.12	4	0.48
S3 Diversified portfolio of *idle* land	0.08	3	0.24
S4 Nationwide corporate support	0.08	3	0.24

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Strategic factor	Weight	Rating	Score
S5 Cross-functional partner selection team	0.08	3	0.24
S6 Process has reached the asset handover stage	0.10	4	0.40
Subtotal strengths	**0.58**		**2.08**
W1 Specific commercial regulation on rates and cooperation mechanisms	0.10	4	0.40
W2 Limited cooperation term	0.08	3	0.24
W3 Relatively lengthy partner selection procedures	0.08	2	0.16
W4 Limited outreach to the community	0.08	3	0.24
W5 Maintenance burden and security risk	0.08	2	0.16
Subtotal weaknesses	**0.42**		**1.20**
Total IFAS	**1.00**		**3.28**
External factors			
O1 *Captive market* in the education area	0.15	4	0.60
O2 *Sportainment* and co-working space trends	0.12	4	0.48
O3 Confirmed investor interest	0.15	4	0.60
O4 Supportive spatial planning regulations	0.08	3	0.24
O5 Community social support	0.10	3	0.30
O6 Post-merger corporate synergy	0.08	3	0.24
Subtotal opportunities	**0.68**		**2.46**
T1 Fluctuations in economic, social, and political conditions	0.08	3	0.24
T2 Competition from private commercial land	0.06	2	0.12
T3 Uncertainty over the status of non-SOE land in DIY	0.06	2	0.12
T4 Decline in flight traffic	0.06	2	0.12
T5 Risk of illegal occupation or double claims	0.06	3	0.18
Subtotal threats	**0.32**		**0.78**
Total EFAS	**1.00**		**3.24**

Source: *triangulated interview data, processed according to Rangkuti (2012). SOE = state-owned enterprise; DIY = Special Region of Yogyakarta.*

The strengths score (2.08) and weaknesses score (1.20) yield an internal difference of +0.88, whereas the opportunities score (2.46) and threats score (0.78) yield an external difference of +1.68. The coordinates (+0.88; +1.68) place the company in Quadrant I (Figure 1), a very favorable situation calling for an aggressive growth strategy (Rangkuti, 2012). This finding indicates that the company should accelerate, and not merely maintain, the land optimization currently under way. This position reflects conditions at the time of data collection and should be reviewed as regulations and market conditions change.

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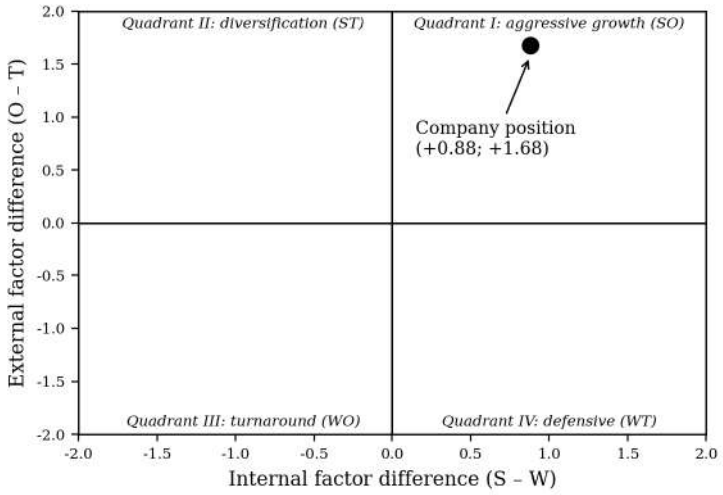

Figure 1. Strategic position of the Babarsari *idle* land optimization in the SWOT quadrant

Matching the factors produced strategy alternatives in all four cells of the matrix (Table 6). The SO strategies focus on accelerating cooperation by leveraging legality and location; the WO strategies on formulating specific regulations and an outreach program; the ST strategies on risk mitigation through accelerated realization and by promoting the advantage of legal certainty; and the WT strategies on defensive measures, namely accelerating specific commercial regulations for land outside the AMP and simplifying administration.

Table 6. SWOT matrix and strategy alternatives for optimizing the Babarsari *idle* land

Strategy	Formulation
SO	SO1: leverage legality and location (S1, S2) to accelerate cooperation on the *sport center* and *commercial mixed use* project with interested partners (O1, O2, O3). SO2: leverage corporate support and group synergy (S4, O6) for long-term partnerships with nationwide investors. SO3: involve the cross-functional selection team and community support (S5, O5) in a local MSME partnership scheme.
WO	WO1: prepare a specific board of directors' decree on rates and cooperation mechanisms for land outside the AMP (W1, O3). WO2: propose flexibility in the cooperation term and extension options for large investments (W2, O2, O3). WO3: develop structured outreach and a regular communication forum with community leaders (W4, O5).
ST	ST1: accelerate the realization of ongoing cooperation to mitigate illegal occupation and investor withdrawal (S6, T1, T5). ST2: highlight asset legality as a differentiator amid uncertainty over land status (S1, T3). ST3: leverage the diversification of the land portfolio to mitigate the decline in traffic (S3, T4).
WT	WT1: accelerate specific commercial regulations for land outside the AMP and strengthen external communication as a defensive measure against uncertainty (W1, W4, T1, T3). WT2: simplify administrative processes to avoid losing investor momentum due to competition from private land (W3, T2).

Source: *interview data and company documents, adapted from the SWOT matrix of David et al. (2017).*

Resource Advantages: VRIO Analysis

Six strategic resources and capabilities were assessed using the VRIO framework (Table 7). Four resources, namely the physical land, strategic location, asset legality, and the competence of human resources (HR) in the commercial, asset and legal, and finance functions, meet all four criteria and generate sustained competitive advantage. Land of almost 5,000 m² on a main road in a densely populated area is rarely available, and the combination of area, location, and certified state-owned enterprise status is difficult to imitate. The location is inherent and cannot be relocated, and it has been a principal consideration in the marketing strategy and the

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HBU study. Legality is actively maintained by the asset and legal unit through periodic inventory and monitoring, and it is an important differentiator for investors amid issues of land status in the Special Region of Yogyakarta. HR competence has been built through long work experience and an understanding of the specific commercial regulations for land outside the AMP, and it has been structured into a cross-functional selection team.

Table 7. VRIO evaluation of strategic resources for optimizing the Babarsari *idle* land

Resource/capability	V	R	I	O	Competitive implication	Notes (rationale for assessment)
Babarsari *idle* land (physical, 4,945 m²)	Yes	Yes	Yes	Yes	*Sustained competitive advantage*	An area of 4,945 m² on a main road in a densely populated area is rarely available (rarity). The combination of area, location, and title evidenced by Management Rights Certificate No. 00009 is difficult to imitate. The trade and services subzone (K-2) designation supports commercial use (value).
Strategic location	Yes	Yes	Yes	Yes	*Sustained competitive advantage*	Adjoins government offices, is connected to the Solo–Yogyakarta highway, and is surrounded by universities, shopping centers, and densely populated residential areas. The location is inherent and cannot be relocated, and is therefore rare and difficult to imitate.
Asset legality (*clean and clear*)	Yes	Yes	Yes	Yes	*Sustained competitive advantage*	Certified in the company's name, not in dispute, and confirmed by the independent appraiser's report. This status is a differentiator that gives investors certainty amid issues of land status in the Special Region of Yogyakarta, and it is maintained through periodic inventory and monitoring by the asset and legal unit.
Corporate reputation	Yes	Yes	Yes	No	*Unused competitive advantage*	No (O): the reputation is valuable and difficult to imitate, but it is not yet supported by specific marketing and rate arrangements for *idle* land (W1), so it has not yet been fully utilized.
Stakeholder network	Yes	Yes	Yes	No	*Unused competitive advantage*	No (O): relationships with stakeholders (the surrounding community) have not yet been optimized (W4).
HR competence	Yes	Yes	Yes	Yes	*Sustained competitive advantage*	A relatively long length of service, namely 25 years, in the commercial field, and active participation in marketing training.

Source: *interview and document data, processed according to the VRIO framework of Barney and Hesterly (2015). V = value; R = rarity; I = imitability; O = organization.*

Corporate reputation and the stakeholder network are valuable, rare, and difficult to imitate, but are not yet optimally supported by the organization. The reputation has not yet been fully utilized because the company's internal regulation on commercial activities within the company does not yet specifically govern the marketing and special rates of *idle* land (W1). Stakeholder management has not yet been optimized (W4). Accordingly, both resources are classified as *unused competitive advantage*, which relates directly to weaknesses W1 and W4 in the SWOT analysis.

This assessment is supported by the following interview and document evidence. On legality, MAL stated, "The ownership is legally valid in accordance with the certificate held by PT Angkasa Pura Indonesia (Persero), with *clean and clear* status, so there

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is no dispute with any party," which is consistent with Management Rights Certificate No. 00009 and the KJPP report (2025). On location, the statements of MC, CO, and INV regarding the location and the scarcity of land are consistent with the description of the location in the HBU report. On human resource competence, the statements of GM and MAL regarding experience and training are consistent with the composition of the selection team in the selection plan document. On organizational readiness, the views of CO and INV regarding rates and the cooperation term are consistent with the provisions of the commercial activity guidelines.

Strategy Formulation and Value Creation Assessment

Three strategy alternatives were assessed using five value creation indicators (Table 8). Office space excels in nominal economic value but does not yet have a confirmed partner and faces many competitors in Sleman Regency. The sports center with integrated commercial facilities ranks highest on four of the five indicators, namely asset utilization, investor attractiveness, competitive advantage, and business sustainability. This advantage is supported by a faster payback period (9.09 years compared with 11.28 years for office space), confirmed investor interest, alignment with market trends, and community support. The vacant land lease is in the low category on all indicators.

Table 8. Value creation assessment of Babarsari land development strategy alternatives

Alternative	Economic value	Asset utilization	Investor attractiveness	Competitive advantage	Business sustainability
Vacant land lease	Low (capitalization rate 0.5%)	Low	Low	Low	Low
Office space (HBU study result)	High (NPV IDR 36.38 billion)	High	Medium (large capital expenditure, no partner yet)	Medium (many competitors)	Medium
Sports center and *commercial mixed use* (alternative currently in process)	Medium–high (NPV IDR 12.61 billion; IRR 11.64%)	High (up to asset handover)	High (two letters of intent)	High (*captive market* and *sportainment* trend)	High (social support; not traffic-dependent)

Source: *interview data, DRS (2025), and HBU Study Report (2025), assessed by the researchers according to five operational indicators (Table 9) that refer to the concept of value creation (Porter, 1985).*

The high, medium, and low categories in Table 8 constitute an ordinal scale developed by the researchers as an analytical aid, with conceptual reference to Porter (1985) and Koller et al. (2020) and presentation in matrix form (Miles et al., 2014). The scale is not a standardized measure, so the assessment is interpretive; the guidelines are detailed in Table 9.

Table 9. Guidelines for value creation assessment categories

Category	Meaning
High	The indicator is met and supported by concrete data or documents
Medium	The indicator is partially or conditionally met
Low	The indicator is not yet met or not yet supported by data

Source: *prepared by the researchers.*

A higher net present value (NPV) indicates greater potential economic value, but does not necessarily indicate readiness for implementation. Readiness also depends on the certainty or interest of partners, capital expenditure requirements, market conditions, the cooperation term, and stakeholder acceptance. In this study, the NPV of office space (IDR 36.38 billion) is higher than that of the sports center (IDR 12.61 billion), and this difference remains an important consideration in decision-making.

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The integration of SWOT, VRIO, and value creation analyses yields four groups of strategies. The top-priority strategy (SO) is to continue and accelerate cooperation on the sports center and integrated commercial facilities by leveraging the resources that meet all VRIO criteria (S1, S2, S6) to capture the educational *captive market* and the *sportainment* trend (O1, O2, O3). The organizational strengthening strategy (WO) is to reinforce specific commercial regulations on rates and standard mechanisms for optimizing land outside the AMP, and to build structured outreach and local MSME partnerships, so that reputation and networks are transformed from unused advantages into sustained advantages. The revenue diversification strategy combines food and beverage, retail, and services with the sports center to bring economic value closer to that of office space without sacrificing the payback period and social support. The risk mitigation strategy (ST/WT) accelerates the monitoring and certification of other *idle* land to reduce the risk of illegal occupation, and considers the function of office space on other land with similar market characteristics as long-term portfolio diversification.

DISCUSSION

Theoretical Contributions and Comparison with Previous Studies

The findings of this study reinforce the resource-based view that sustained competitive advantage originates from valuable, rare, and difficult-to-imitate resources, but is realized only when the organization is able to manage them (Wernerfelt, 1984; Barney, 1991; Peteraf, 1993). The company already possesses physical and legal resources that meet the first three criteria, yet their conversion into economic value depends on organizational dimensions, namely regulation, institutions, and coordination mechanisms. This is in line with Grant (1991), who emphasized the role of organizational capabilities in transforming resources into actual advantage. The key finding of this study is a conversion gap between resource quality and organizational readiness: weaknesses W1 (score 0.40) and W4 (score 0.24) in the SWOT analysis may explain why reputation and the stakeholder network are still classified as unused advantages in the VRIO analysis.

The main contribution of this study is an explanation of the gap between resource quality and the organization's ability to convert it into economic value. In this case, the three analytical tools answer different questions. SWOT identifies organizational constraints, particularly the absence of rate and cooperation mechanism arrangements (W1) and of communication with the community (W4). VRIO shows resources that are valuable but not yet fully utilized, namely corporate reputation and the stakeholder network. The value creation assessment helps distinguish alternatives that are financially superior from those that are more ready to be implemented. The linkage among the three provides the basis for explaining why high-quality resources have not yet fully generated economic value. These findings derive from a single case study with nine informants and are therefore regarded as a contextual explanation and analytical generalization, not as a generally validated framework. Testing on other land parcels or branches is needed to assess its applicability. It should also be noted that the existing guidelines constitute an important foundation, and their refinement can be viewed as a further stage of a process already under way.

The value creation assessment in this study used the concept of value creation and competitive advantage (Porter, 1985) as its conceptual basis, whereas the five indicators and assessment categories are the researchers' operationalization and not standard indicators from Porter. From this framework, the alternative with the highest NPV is not always the alternative that is most ready to be implemented. Office space shows a higher nominal value, whereas the sports center with integrated commercial facilities shows a shorter payback period, confirmed investor interest, and community support. This finding is in line with valuation principles that treat the timing and certainty of cash flows as elements of value (Koller et al., 2020) and with Messer's (2012) view that airport land development choices need to weigh risk and return. The HBU study results and the alternative currently in process can be regarded as complementary, that is, depicting financial attractiveness and implementation readiness under current conditions; both remain relevant for considering the development of other land.

Relative to previous studies, this study makes four contributions. First, in contrast to the findings of Handayani et al. (2023), which showed the dependence of non-aeronautical revenue on traffic, this branch office is developing asset-based revenue from land outside the AMP that does not depend on flight traffic. This finding supports Zagrajek's (2025) idea of non-aeronautical revenue independent of passenger traffic, and shows its concrete application at the level of an airport branch office with declining traffic. Second, strategic location (S2) obtained the joint-highest IFAS score (0.48) and is classified as a sustained advantage, in line with Wang et al. (2025), who emphasized the importance of spatial factors; this study adds how an organization mobilizes its internal resources to convert that locational advantage. Third, Maziku and Bankwa (2024) focused on revenue sources within the airport

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area, whereas this study examines assets outside the AMP, thereby extending the scope of non-aeronautical revenue research to the land-based domain. Fourth, this study proposes a contextual analytical framework combining SWOT, VRIO, and value creation assessment, which still requires further testing. The economic condition threat (T1) is consistent with Martel (2009), who showed that recessions and oil price fluctuations affect non-aeronautical revenue, so investor decisions need to be managed through regulatory certainty and early communication.

Managerial Implications and Implementation Roadmap

Managerially, management needs to pursue two agendas in parallel: accelerating the cooperation already under way by leveraging the momentum of investor interest and social support, and strengthening organizational capacity by proposing an internal regulation on rates and cooperation mechanisms for *idle* land outside the AMP to the head office or regional office, so that it applies as a standard guideline for the entire branch network. This regulation is intended to refine the commercial activity guidelines and the KJPP appraisal practices already in place. The main obstacle lies in the readiness of regulation and coordination, not in investor interest.

This study proposes a uniform and replicable commercialization pathway for *idle* assets, consisting of ten stages: (1) asset screening, (2) HBU study, (3) market sounding, (4) financial feasibility study, (5) legal verification, (6) investor selection, (7) contract, (8) development oversight, (9) monitoring, and (10) evaluation for extension or redevelopment. Assets are classified into four categories to clarify priorities: *ready-to-monetize* for assets whose legality, location, market demand, and investor interest are already in place; *development-ready* for assets whose best use needs to be tested through an HBU study and market test; *strategic option* for assets not yet ready to be monetized and managed through land banking; and *risk asset* for assets whose legal, regulatory, or market issues must first be mitigated. The implementation stages are summarized in the roadmap in Table 10.

Table 10. Implementation roadmap for *idle* land optimization

Stage	Focus	Main activities
0–6 months	*Asset readiness*	Legal verification, HBU refinement, asset classification, market sounding, standardization of investor proposals, and analysis of the fit of specific regulations.
6–12 months	*Commercialization*	Investor selection, contract signing, construction, stakeholder engagement, and monitoring of performance indicators.
Years 1–2	*Optimization*	Monitoring of revenue and occupancy rates, evaluation of tenant performance, and adjustment of the commercial mix.
Years 2–5	*Portfolio expansion*	Replication of the Babarsari model to Maguwoharjo and other potential assets, and cross-branch benchmarking.

Source: *results of the research analysis (2026).*

Limitations and Future Research

This study has several limitations. The single case study design with nine informants limits statistical generalization; the findings are better regarded as analytical generalization for airports with declining traffic and land outside the AMP. The VRIO and value creation assessments are categorical (high, medium, low) and were carried out by the researchers, as were the SWOT ratings based on the intensity and frequency of the data, so they still involve some subjectivity. The lead researcher is also an employee of the company and conducted participant observation; although this has been controlled through triangulation and confirmation of results, the potential for positional bias still needs to be considered. The financial feasibility data come from a single KJPP, and the roadmap has not yet been tested in implementation. Future research is suggested to develop a quantitative multicriteria strategic assessment model to replace categorical assessment, to compare several land parcels (Demangan, Maguwoharjo, Babarsari) or several airport branches to test the replicability of the model, and to trace implementation results longitudinally. Future research should also examine revenue realization, business operations, and workflows in accordance with established standards after the partner begins operating, so that revenue realization and strategy effectiveness can be evaluated using actual data.

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CONCLUSION

The optimization of the 4,945 m² Babarsari *idle* land is a form of diversification of non-aeronautical revenue sources that is not affected by flight activity. The land was previously not utilized productively, but it has clean and clear legal status and has entered the asset handover stage for cooperation on a sports center with integrated commercial facilities. Revenue from land outside the AMP does not depend on flight traffic. Actual revenue realization will be evaluated once the business activities are in operation.

The contribution of the land is regarded as not yet optimal because of three constraints, namely the absence of specific arrangements for rates and cooperation mechanisms for land outside the AMP, the limited cooperation term, and the relatively long administrative process of partner selection. The weighted SWOT analysis places the company in Quadrant I with coordinates (+0.88; +1.68), indicating the need to accelerate a growth strategy. The VRIO analysis shows that the physical land, location, legality, and human resource competence are sources of sustained competitive advantage, whereas corporate reputation and the stakeholder network have not yet been utilized because organizational support is not yet fully in place. The integration of the two analyses shows that limited cooperation arrangements and stakeholder coordination are important obstacles amid dynamic economic conditions, and that strengthening them will help the company convert the advantages it already holds into economic value.

The sports center with integrated commercial facilities ranks highest on four of the five value creation indicators even though its NPV is lower than that of office space, so the most appropriate alternative is determined by the balance among economic potential, implementation readiness, and stakeholder acceptance. The strategies formulated are accelerating the cooperation under way, strengthening the organization through internal regulation and stakeholder communication, diversifying revenue within the *commercial mixed-use* concept, and mitigating risks on other assets. For management, the main recommendation is to propose specific arrangements for rates and standard cooperation mechanisms for *idle* land; for investors, this opportunity can be regarded as a structured business opportunity with early communication regarding the cooperation term, revenue sharing, and extension options. These findings derive from a single case study and therefore need to be tested further on other assets and branches.

CONFLICT OF INTEREST

The first author is an employee of PT Angkasa Pura Indonesia, Adisutjipto Yogyakarta Airport, the object of this research. The views expressed in this manuscript are those of the authors and do not represent the official position of the company.

REFERENCES

1. Airports Council International. (2025, May 8). *Maximizing non-aeronautical revenues: Key to airport financial sustainability*. ACI World Blog. https://blog.aci.aero/airport-economics/maximizing-non-aeronautical-revenues-key-to-airport-financial-sustainability/
2. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108
3. Barney, J. B., & Hesterly, W. S. (2015). *Strategic management and competitive advantage: Concepts and cases* (5th ed.). Pearson.
4. Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
5. David, F. R., David, F. R., & David, M. E. (2017). *Strategic management: A competitive advantage approach, concepts and cases* (16th ed.). Pearson.
6. Graham, A. (2018). *Managing airports: An international perspective* (5th ed.). Routledge.
7. Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review, 33*(3), 114–135. https://doi.org/10.2307/41166664
8. Handayani, S., Firmansyah, & Wishnuwardhani, S. O. F. D. (2023). The impact of airport facilities on non-aeronautical revenue through airport traffic and aeronautical revenue as mediating variables. *International Conference on Advance & Scientific Innovation, KnE Social Sciences*, 8(9), 1047–1059. https://doi.org/10.18502/kss.v8i9.13420
9. Kasarda, J. D., & Lindsay, G. (2011). *Aerotropolis: The way we'll live next*. Farrar, Straus and Giroux.
10. KJPP Dino Farid dan Rekan. (2025). *Laporan kajian highest and best use lahan Babarsari* [Highest and best use study report of the Babarsari land] [Unpublished internal report]. PT Angkasa Pura Indonesia.

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IJCSRR @ 2026
www.ijcsrr.org

11. Koller, T., Goedhart, M., & Wessels, D. (2020). *Valuation: Measuring and managing the value of companies* (7th ed.). Wiley.
12. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
13. Martel, F. (2009). External factors and their impact on non-aeronautical revenue. *Journal of Airport Management, 3*(4), 337–344. https://hstalks.com/article/2311/download/
14. Maziku, P., & Bankwa, B. (2024). The impact of non-aeronautical revenues on airport performance at Julius Nyerere International Airport in Dar es Salaam, Tanzania. *International Journal of Research in Business and Social Science, 13*(5), 607–614. https://doi.org/10.20525/ijrbs.v13i5.3552
15. Messer, R. (2012). Making good decisions: The case of airport land development. *Journal of Airport Management, 6*(3), 250–259. https://hstalks.com/article/2258/making-good-decisions-the-case-of-airport-land-dev/
16. Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
17. Peraturan Bupati Sleman Nomor 80 Tahun 2023 tentang Rencana Detail Tata Ruang Kawasan Sleman Tengah Tahun 2023–2043 [Sleman Regent Regulation No. 80 of 2023 on the Detailed Spatial Plan of the Central Sleman Area 2023–2043].
18. Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal, 14*(3), 179–191. https://doi.org/10.1002/smj.4250140303
19. Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
20. PT Angkasa Pura I. (2022). *Keputusan Direksi Nomor KEP.DU.33/KB.03/2022 tentang pedoman kegiatan komersial* [Board of Directors Decree No. KEP.DU.33/KB.03/2022 on commercial activity guidelines]
21. PT Angkasa Pura Indonesia. (2025). *Dokumen rencana seleksi kerja sama pemanfaatan lahan idle usaha, paket LLB-001 (lahan Babarsari)* [Selection plan document for cooperation in the utilization of idle land, package LLB-001 (Babarsari land)]
22. Rangkuti, F. (2012). *Analisis SWOT: Teknik membedah kasus bisnis* [SWOT analysis: Techniques for dissecting business cases]. Gramedia Pustaka Utama.
23. Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
24. Wang, S., Karanki, F., & Gao, Y. (2025). Spatial spillovers in U.S. airport non-aeronautical revenue performance. *Journal of Transport Geography, 130*, 104452. https://doi.org/10.1016/j.jtrangeo.2025.104452
25. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171–180. https://doi.org/10.1002/smj.4250050207
26. Zagrajek, P. (2025). Airport non-aeronautical revenues independent of passenger traffic as a way to build resilience. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, (227). https://doi.org/10.29119/1641-3466.2025.227.48 https://managementpapers.polsl.pl/wp-content/uploads/2025/09/227-Zagrajek.pdf

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