

Proposed Business Strategy for Customer Experience Management Implementation to Support Airport's Non-Aeronautical Business Case Study: PT Angkasa Pura Indonesia

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ABSTRACT

Customer experience has become a prominent focus for airport operators to meet passengers' expectations of seamless, comfortable, and memorable journeys. In September 2024, two major airport operators in Indonesia merged into PT Angkasa Pura Indonesia (API), now operating 37 airports across the nation. As a State-Owned Enterprise, API is mandated not only to become an agent of development and value creator but also to serve as the face and pride of the nation. To fulfill these mandates, API must develop a holistic strategy that enhances customer experience while supporting business sustainability. This study reviews literature on business strategy and customer experience management, examines the company's current condition, and conducts research to understand passenger profiles and their perceptions of key touchpoints during departure journeys. Market analysis, internal company assessments, and external environment evaluations were conducted to gain comprehensive insights. Research findings reveal that all touchpoints significantly impact customer satisfaction and willingness to spend. The study proposes an integrated customer experience playbook as a business-level strategy to standardize customer experience understanding and practices company-wide across all airports. This strategy remains flexible, allowing individual airports to develop tailored improvements according to specific touchpoint conditions and financial capabilities. The playbook also serves as a reference for functional units—operations, commercial, and human capital—to develop strategies aligned with customer experience objectives. Additionally, the study recommends implementing partnership models to upgrade service quality at airports with lower costs while potentially opening new revenue streams.

KEYWORDS Customer experience, customer journey, airport, non-aeronautical business, business strategy



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INTRODUCTION

Airports provide the essential infrastructure enabling passengers and freight to transfer between surface and air transport modes while allowing airlines to take off and land (Beifert, 2016; Jorge-Calderón, 2016; Wilke, Majumdar, & Ochieng, 2014). Historically, airports focused primarily on transportation functions, building infrastructure and managing operations across airside, terminal, and landside areas (Budd, Ison, & Budd, 2016; Price & Forrest, 2016). Airport management concentrated on ensuring safety, security, and regulatory compliance while generating revenue from aeronautical activities (Yadav & Nikraz, 2014).

However, airports have undergone significant evolution over recent decades. In the modern aviation era, air travel has become increasingly accessible to wider audiences, with global travel trends steadily rising. According to the International Civil Aviation Organization (ICAO), aside from the COVID-19 anomaly, air transport passenger traffic has increased consistently since 1945 for both domestic and international flights. With rising passenger numbers and travel frequency, expectations have shifted accordingly. Passengers now expect airports to function as leisure destinations offering attractive experiences and a genuine sense

of place. As these expectations evolved, airports broadened their operational focus beyond traditional functions. Customer experience has emerged as a mandatory priority in the airport industry. Passengers demand not only safety and security but also seamless journeys, comfortable environments, and services satisfying their specific interests. Consequently, airport development and management have shifted from operation-centric to customer-centric approaches, ensuring strategies prioritize passenger needs (David, 2011; Boyles, 2022; Bruin, 2016).

The rise of customer-centric airports aligns with the growing importance of Airport Service Quality (ASQ). Today, evaluating service quality has become a primary concern for airport management companies competing to attract passengers. Measuring ASQ is crucial for identifying deficiencies and suggesting improvements that guide management decisions (Barakat et al., 2021). Global measurement systems from organizations such as the Airport Council International (ACI) and Skytrax provide guidelines for airport management companies to strategize service improvements and enhance customer experiences based on international standards. These global measurements also shape airport reputations, reflecting their commitment to delivering exceptional customer experiences (Ayutthaya & Koomsap, 2019; Batouei et al., 2020; Bezerra & Gomes, 2019). Therefore, airport management must invest substantial effort and resources into capital expenditure (CAPEX) and operational expenditure (OPEX) to meet passenger expectations and achieve favorable global ratings.

As commercial enterprises, airports must generate revenue and maintain profitability to sustain operations, deliver passenger services, and invest in future development. Airports generally generate operating revenue through two major sources: Aeronautical Business and Non-Aeronautical Business. Aeronautical Business revenue derives from aviation-related activities such as Passenger Service Charges, Aircraft Parking and Landing Fees, and Aerobridge Fees. This business segment is highly regulated and must comply with international aviation principles. According to ICAO Document 9082, airports must maintain accounts providing a satisfactory basis for determining and allocating costs to be recovered. Charges must also be consulted with States and Users. Consequently, limited opportunities exist for revenue improvement, as charges for airlines and passengers must reflect the airport's capital expenditure (CAPEX) and operational expenditure (OPEX) based on utilized services.

Because aeronautical revenues often prove insufficient to cover the full infrastructure, operational, and service costs, diversifying airport activity and revenue portfolios becomes essential for serving passengers (ACI, 2023). Non-Aeronautical Business offers greater flexibility in business models and better aligns with passenger characteristics. This segment includes duty-free shopping, retail outlets, food and beverage establishments, services, parking facilities, advertising, space rental, and other ancillary businesses. Airport business models began transforming around the mid-1990s to emphasize non-aeronautical revenue sources, resulting in their growth as a proportion of total revenue (Li et al., 2024). Prior to the COVID-19 pandemic, non-aeronautical revenue primarily originated from in-terminal passenger shopping, including retail and food and beverage operations (ACI, 2023). While passenger numbers directly affect non-aeronautical business revenue, unlike aeronautical business with fixed charges, non-aeronautical business—especially passenger shopping—can increase through revenue-sharing or concession agreements between airport management and business partners. Previous research has demonstrated a positive association between overall passenger

satisfaction and non-aeronautical revenue, indicating that prioritizing customer experience can positively impact non-aeronautical revenue generation (Li et al., 2024).

Managing customer experience in airports presents significant challenges due to the highly regulated nature of the aviation industry, as outlined in Indonesia's Law No. 1 of 2009 regarding air transport, which establishes government oversight through the Ministry of Transportation. This regulation encompasses various airport management aspects, including services and commercialization, exemplified by recent Minister of Transportation Regulation No. PM 41 of 2023, which delineates the separation of aeronautical and non-aeronautical services. Aeronautical services, such as Passenger Service Charges and landing fees, require Ministry consultation, while non-aeronautical services like retail and food and beverage operations are subject to less stringent regulations, allowing airport companies greater autonomy. The complexity of managing multiple stakeholders—including airlines, ground handling companies, and government agencies—compounds the challenge of ensuring compliance with safety and service standards while striving to enhance passenger experiences, which is vital for boosting non-aeronautical revenue.

Companies like PT Angkasa Pura Indonesia, which manages 37 airports following the September 2024 merger of two major Indonesian airport operators, must navigate these dynamics to meet diverse passenger expectations and drive corporate growth. The post-merger landscape presents unique challenges, including organizational integration, standardization of service delivery across diverse airport portfolios, and balancing profitability with the company's mandate as a State-Owned Enterprise to serve as both an agent of development and a value creator for the nation. These circumstances necessitate an integrated strategy aligning customer experience with commercial objectives to foster increased spending in airport terminals.

This research addresses a critical gap in understanding how customer experience management can be strategically implemented to support non-aeronautical business development in the Indonesian airport context, particularly following a major industry consolidation. The study explores the correlation between customer experience and spending willingness, identifies critical touchpoints influencing this relationship, and proposes corporate strategies to enhance customer experience. By doing so, it enriches the body of knowledge on improving non-aeronautical business within airport management contexts, particularly in emerging markets facing unique regulatory and operational challenges.

METHOD

The qualitative component utilized semi-structured interviews with internal organization members and business partners to explore the relationship between customer experience and willingness to spend. These interviews targeted high-level management and external business partners to understand strategic perspectives and operational challenges in implementing customer experience initiatives.

The quantitative component employed structured surveys distributed to passengers to capture their expectations and perceptions during airport journeys, which influence spending behavior. The survey instrument incorporated Likert scale questions to measure customer perceptions across key touchpoints (Ayutthaya & Koomsap, 2019; Batouei et al., 2020; Bezerra & Gomes, 2019).

Additionally, the research analyzed current business strategies implemented by PT Angkasa Pura Indonesia related to customer experience management and non-aeronautical business. This analysis included document review of company policies, strategic plans, and performance reports, supplemented by observations of actual practices at selected airports.

Data integration followed a convergent parallel design, where qualitative and quantitative data were collected simultaneously, analyzed separately, and then merged to form comprehensive conclusions. Qualitative findings provided contextual understanding and explanatory depth, while quantitative results offered statistical evidence of relationships between customer experience factors and spending willingness. The integration occurred during the interpretation phase, where both datasets were compared and contrasted to develop business strategy recommendations.

By exploring PT Angkasa Pura Indonesia's competitive advantage in enhancing customer experience to drive non-aeronautical revenue, the research outlined actionable strategies, ensuring a comprehensive understanding of factors influencing passenger willingness to spend. This methodological approach yielded practical, evidence-based strategic recommendations (Creswell, 2018).

RESULT AND DISCUSSION

External Analysis

General Environment Analysis / PESTEL Analysis

External analysis will be conducted by using PESTEL analysis for general environment analysis and Porter 5 Forces for industrial analysis, specific in airport-aviation industry. The key purpose of this analysis is to identify opportunities and threat that can affect company performance occur from external factors.

Political

Indonesia is a republic country lead by the President that become the head of state and also the head of the government. The service period for a president is maximum 2 periods. During the governing period as an executive body of the government, the President helped by the Vice President and also the presidential cabinet consist of various ministry and government bodies. Indonesia can be considered as multi partied country, each Indonesia civilian over 18 years have right to create or join political party. Indonesia itself apply tripartite concept to balance the government. To conduct check & balance for the executive, Indonesia have legislative body under House of Representative start from the regency level until national level. And for Judicative, Indonesia have the supreme court. The President of Indonesia had just changed from Joko Widodo which has already fulfilled 2 period of presidency towards Prabowo Subianto. Prabowo Subianto used to be the Minister of Defense during Joko Widodo Presidency period and also the competing candidate of Joko Widodo. With the change of President, usually will be followed by the shift in government focus, governing style, and also the people behind policy making. This condition will also affect PT Angkasa Pura Indonesia as a state owned enterprise which naturally have to be align and support government direction.

Indonesia maintains good foreign relations with the neighboring countries and actively join international association and forum such as United Nation (UN), Association of South East Asian Nation (ASEAN), World Trade Organization (WTO), G20, etc. Indonesia still consistent

to apply non-block international policy amidst the heated situation between major countries such as USA, China, and Russia. This global political turbulence may impact aviation industry of Indonesia due to air traffic connectivity situation and also the number of travelers.

Economic

Indonesia's GDP in 2024 reached 22,139 Trillion IDR with GDP per capita reached IDR 78,6 million (Badan Pusat Statistik, 2025). Indonesian economic demonstrate positive constant positive growth since 1998. Even the economic used to be disturbed due to Covid-19 outbreaks, the economic in general start to recover. The growth and resilience of Indonesian economic supported by the productive demographic. According to Badan Pusat Statistik cited by Dorimulu, 2021, Indonesia have bonus demographic due to the population age 15 – 64 years old reach 70,7% from the total population. This number of population may stimulate active consumption including traveling and shopping.

Despite of Indonesian positive growth, the turbulence in International economic also affect Indonesia. With a lot of geopolitics tension, Indonesian Rupiah currency get high pressure which make the rate gradually decline which create disadvantage for Indonesian business. This condition also worsened by the implementation of the new VAT rate from 10% to 11% and the probability to implement the final rate at 12%. This condition may affect the product prices and also the spending power of the population.

Furthermore, post covid-19 situation and also Indonesian currency situation make situation difficult for Indonesian domestic airline to procure aircraft to fulfill the demand which start to recover. Until the end of 2024, active aircraft in Indonesia are no more than 400, when the proportional numbers are around 700 aircrafts according to pre covid-19 demand (Aprilia, 2024).

Social

Social elements cover various aspects in society such as culture, standards, and values. As an archipelagic country Indonesia have rich variation of tribes, cultures, and lifestyle. Due to unbalance economic condition, a lot of Indonesian urbanize towards major cities such as Jakarta, Surabaya, Bali, Balikpapan, etc to seize opportunities with various of job offered there. This condition triggers the requirement to travel via air as the fastest method to travel across archipelago.

Indonesia considered a country with warm interpersonal character and unique culture that highly value hospitality towards other. This condition makes Indonesia have a natural potential for high quality hospitality delivered by the people. Some regions have already cultivated this natural benefit as Bali. Bali is already known worldwide for its uniqueness in culture and high quality hospitality not only by the staff, but also by the people in general. The government now want to replicate the success of Bali towards other region with the long term project called Super Priority Tourism Destination Development (*Daerah Pariwisata Super Prioritas – DPSP*).

According to Hofstede country's cultural dimension, Indonesia is a collectivist country, which affect the activity and decision making lean on the the social group where they belong. Collectivist society also create tight bonding between family members which may require them to meet. This phenomenon can be seen during the Idul Fitri holiday and Imlek. As a collectivist society, Indonesian also tend to influenced by the group member for the choices including

shopping and drinking choice. Indonesian also value meeting activity in person to ensure high social engagement in formal and non-formal moment. But after Covid-19, the behavior shifts where some organization prefer online meeting for efficiency or shorten the travel period.

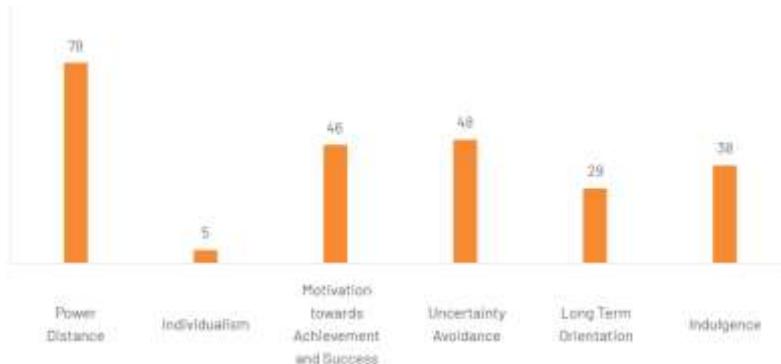


Figure 1. Hofstede's Indonesia Cultural dimensions

Technology

Indonesia is still can't be considered as technologically advance country or global leader in high-tech innovation such as Germany, Japan, South Korea, etc. With large archipelago and multiple economic gaps across location, technology advancement in Indonesia may face challenges. However, despite of the challenges the growth rate of internet adoption is tremendous including also the penetration usage of smartphone. According to (World Bank, 2023), the percentage of individuals accessing internet already hit 70%. The penetration of smartphone user also very rapid that according to (Statista, 2024), the number of smartphone users in Indonesia in 2023 have already hit 168,4 million user and in 2024 projected to hit 201,97 million person, 71% percent from Indonesia total population.

The penetration of internet and smartphone usage may affect the behavior of the citizen and also the industry. The prospective customer starts to find more information towards various digital channel such as website and social media. The payment activities also shift not only thru cash or swipe card, but also digital payment such as thru QR code or dedicated apps. With the increasing dependence of smartphone for daily activities, customer also expect more seamless services with smartphone as enabler for integrated services. With smartphone and internet access, customer also tend to be more active as the product / service advocate thru social media. With this behavioral shift, Airport also need to answer the customer expectation in terms of operating model and services.

Environment

Indonesia as an archipelagic nation with wide span of islands, seas, and various geographical characteristic is highly exposed to environmental challenges. This challenges not only for basic condition such terrain variety, but also situation that can led into natural disasters such as earthquake, volcanic activities with high frequency of eruptions, and also unmanaged heavy rain that led into floods. This situation affects infrastructure-heavy and transportation industries including aviation industries. In long term perspective, with climate change situation also poses growing risk, rising sea levels may threaten airports located in coastal area. Unpredictable weather also may disrupt flight activities which not only affect flight operation, but also the airport and the passengers.

At the same time, environmental sustainability become global concern including also Indonesia. Indonesia government have set long term program called Indonesia Net Zero Carbon 2060. Regulatory framework for sustainability implementation is also gradually implemented across industries including also transportation and state owned enterprise. From international perspective, ICAO & ACI are also actively push airports across the world to implement sustainability practice at the airport such as green building standards, energy-efficient systems, and waste management practices in order to meet both regulatory requirement and customer expectations.

Legal

Indonesia's legal and regulatory governed by emphasizing strong government role managing various aspects including economy sector thru regulation frameworks with multiple layers of regulation. Indonesia itself operate under a civil law system, where regulations are detailed and centralized. Indonesia also implements national and sectoral regulation, where business must comply both. This model aims to maintain order, protect public interest, and support national or regional priorities.

For the aviation industry, the legal and regulatory framework can be considered strict due to the safety-critical nature and the strategic positioning of industry for the nation. Airports and related aviation services are regulated primarily by the Ministry of Transportation (*Kementerian Perhubungan Republik Indonesia*), which regulate safety, security, services standards, and pricing for aviation related business activities. Apart from Ministry of Transportation, Airport also need to comply the regulation by the related ecosystem such as immigration, customs, quarantine, including also local regulation such as smoking area permit, parking retribution and local tax for F&B business.

If the operator is a State-Owned Enterprise (SOE), as in the case for PT Angkasa Pura Indonesia, the compliance framework extended further towards the regulation framework of Ministry of State-Owned Enterprise (BUMN). SOE are tasked not only generate financial value but also as an agent of development including the vehicle of government agendas. SOE management itself can't deliberately decide the course of the company, at certain level the management need to request approval from Ministry of State-Owned Enterprise. The business operation and financial activities are also monitored by the nation auditor because SOE company classified as separated country wealth.

Moreover, Indonesian airports and airports around the world also must align with international aviation standards defined by international aviation organization such as the International Civil Aviation Organization (ICAO), ensuring global aviation operation compatibility standardize safety and security compliance.

Table 1. PESTEL Analysis

Political	1. Change of presidency may shift government directions and priorities 2. Indonesia maintain stable foreign relations with all major countries support air traffic and connectivity development. But global political tensions may disrupt the situation.
Economic	1. Indonesia have demographic bonus in productive age that can support resilient economic growth 2. Domestic consumption trend encourages spending on travel and shopping activities 3. Global economic turbulence and Rupiah depreciation put pressure on prices and business costs

	<ol style="list-style-type: none"> 4. VAT increases from 10% to 11% and potentially to be 12% may reduce consumer spending power
Social	<ol style="list-style-type: none"> 1. Indonesia archipelagic and society with various cultures drive urban migration to major cities driving travel demand 2. As collectivist society, group opinion play significant role in decision making including travel and shopping behaviours 3. High importance of family gathering during cultural / religion events stimulate peak travel periods 4. Business activities in Indonesia shift after covid-19 from offline meeting towards selective method between online and offline.
Technology	<ol style="list-style-type: none"> 1. Indonesia is not a global technology leader but shows strong adoption in internet and mobile device which enable digital solution 2. Digital savvy society drive shift in customer behavior towards digital channels to search, save, and share information, cashless payment, and mobile-enabled services 3. Higher expectation for seamless digital experiences in public services including in the airport
Environment	<ol style="list-style-type: none"> 1. Indonesia faces high environmental risks from natural disaster and climate change which can disrupt transportation operations 2. Various push and expectation for more sustainability airport operation
Legal	<ol style="list-style-type: none"> 1. Indonesia operate under multi layered national and sectoral regulations 2. Aviation industry heavily regulated by the Ministry of Transportation. The operator need to comply the safety, security, service standards, and also the pricing method of aeronautical business 3. Airport also need to comply with the related ecosystem regulation such as immigration, customs, local taxes, etc. 4. SOE like PT Angkasa Pura Indonesia faces added oversight from the Ministry of State Owned Enterprise and monitored by the national auditor 5. Internationally, airport operator in Indonesia also need to comply and catch up with international standard set by ICAO.

Industry Analysis / Porter's Five Forces

Bargaining Power of Suppliers

Airport is a complex facility with various activities happen either to directly enable air transport operation or supporting activities. For the air transport there are suppliers such as aviation fuel providers, ground handling, and airport technology / systems provider. These suppliers are very segmented suppliers with specialized capabilities. These suppliers usually large company with long history of operation, economic capability and political exposure which usually hold substantial bargaining power. Apart from the air transport operation suppliers, there are suppliers for supporting activities such as: Manpower outsourcing company for cleaning services and customer services. Airport business partner for commercial outlets, money changer, and taxi services. The supporting companies relatively widely available in general market and quite easy to adapt because the similar working standard with hotels or shopping center. Considering the scale and centralized procurement power of PT Angkasa Pura Indonesia, the bargaining power of suppliers can be considered moderate because PT Angkasa Pura Indonesia have leverage in negotiations but on the other hand the suppliers hold crucial functions to ensure the airport operation and services run smoothly.

Bargaining Power of Buyers

There are 2 key buyers of the the airport, airline and passengers. Airline have relatively high bargaining power as key customer and partner of the airport. Without airline operation in

an airport, the airport will not only be losing revenue from aeronautical business but also unable to generate non-aero revenue because there is no passenger depart and arrive at the airport. Airline operation also generate potential ancillary revenue such as Maintenance, Repair and Overhaul center (MRO), Aircraft catering, and airline office rent. According to Ministry of Transportation Regulation number PM 136 year 2014 and PM 179 year 2015 regarding to Method and Procedure for Aeronautical Charges, the aeronautical charges that related to airline such as landing, parking, aviobridge usage, check-in counter need to be consulted and gather input with national / international airline representative before submitted to Ministry of Transportation for further review and verification.

For the passenger itself, they have limited direct bargaining power since they mostly can't choose the airport and its operator when traveling to a certain destination. They closest most passengers can do is choose the alternative airlines or routes. But with the raise of social media, the bargaining power of buyers raise due to the passenger as customer can be the advocate of the airport which may affect the image of the airport operator company, either positive or negative. Therefore, the bargaining power of buyer can be considered high.

Threat of Substitutes

Indonesia as archipelagic country, for long distance island-to-island and also across continents, there is very limited option especially for passenger to travel apart from air travel thru airport. Therefore, domestic long distance travel and international travel require air transport as the most convenient method. Alternative transport is just quite effective for well-developed main islands such as Java where there is various land transportation available such as toll road and train. For business activities, in post Covid-19 virtual meetings become popular for substitution for in-person meeting which may slightly reduce the need to travel. But for family meetings or leisure still need in-person travel. Therefore, the threat of substitutes can be considered low.

Threat of New Entrants

Entering the airport management industry in Indonesia requires extremely high capital investment for infrastructure development. The regulation also strictly controlled by the Ministry of Transportation with various steps and approval required. Airport considered national vital object therefore the government very strict control the development and also the company operate the airport. The existing dominance of PT. Angkasa Pura Indonesia as airport operator managing all major airports further reduce entry opportunities for new player and also signal from the government that an airport considered as national asset. There are potential partnership or public-private partnership (PPP) project related to airport operatorship but still involve PT Angkasa Pura Indonesia within the project. Therefore, the Threat of New Entrants can be considered low.

Industry Rivalry

After the merger of PT Angkasa Pura I and PT Angkasa Pura II, the airport management in Indonesia dominated by PT Angkasa Pura Indonesia with all of major airports in Indonesia as the portfolio. There is nearly no direct rivalry within Indonesia for Airport Management. However, the rivalry happens with airports outside Indonesia especially competing for

connectivity of international hub and connectivity. The increasing focus on passenger experience and non-aeronautical business, especially for commercial outlets, has become one of the competing segments to attract positive customer experience impression and grow airport revenue for further development. Therefore, the Industry Rivalry can be considered Moderate.

Internal Analysis

Resource Analysis

1. Tangible Assets

Financial Resources

According to annual report of PT Angkasa Pura Indonesia (previously PT Angkasa Pura I and PT Angkasa Pura II) from 2019 until 2023, the company had just face financial turbulence due to Covid-19. The company face negative profit for 3 years in a row during 2020 – 2022 and had just finally regain profitable condition in 2023.

But the financial condition still not in ideal condition. On 2023 PT Angkasa Pura Indonesia have to manage 86,2 Trillion IDR asset with 48,3 Trillion IDR long term debt and DER 1,95. After Covid-19 turbulence, the company also finish the merger process in 2024. The merger process itself require costs that need to be compensated by the company either operating cost or non-operating cost which affect the net profit after tax.

Table 1. Financial Performance Comparison 2023 – 2024

	2023	2024	Deviation
Operating Revenue	21,178	20,294	-4%
Operating Cost	15,549	14,83	-5%
EBITDA	9,077	9,438	4%
Net Profit After Tax	2,182	0,797	-63%
NPM	10%	4%	-60%

PT Angkasa Pura Indonesia itself as a State Owned Enterprise has multiple objectives that need to be balanced with the financial capability. PT Angkasa Pura Indonesia aspired to be able to become a value creator which is deliver financial benefit for the shareholder. Meanwhile the company also have to become an agent of development, support the development of underdeveloped location including operating unprofitable airports. According to the financial report 2024, just 8 airports can record positif EBITDA and net income, 9 airports with positive EBITDA but record net loss, and 15 airports with both negative EBITDA and net loss. PT Angkasa Pura Indonesia also aspired to become the face and pride of Indonesia, which require remarkable airport experience. There are still challenges to recover in post Covid-19 situation and also consolidate financial condition post-merger. But in long term perspective, there are more room for revenue generation and cost efficiency with both companies' combined into single big airport company.

Organizational Resources

After merger process, PT Angkasa Pura Indonesia internal organization operating model consist of 3 layers: Head Office, Regional Office, and Branch Office. Head office focus on strategic activities such policy design and development, Regional Office become the extension of Head Office to oversee the policy implementation alignment in the airport branches and also become the resources and assets optimizer. Airport branch itself focus on the airport

operation and policy implementation. With this organization model each layer can focus on their role to deliver the goals of organization.

Apart from the main internal resources, PT Angkasa Pura Indonesia also have JV airports with international airport operator such as Incheon International Airport Corporation (IIAC) to operate Batam Airport (BTH). With this relationship PT Angkasa Pura Indonesia as an organization also have access towards another international airport operator.

Technology Resources

To support internal business process, PT Angkasa Pura Indonesia already provide office supporting system such as corporate email, ERP system, and supporting system to digitalize internal business processes. For airport operation activities, PT Angkasa Pura Indonesia airports already implemented various systems and technology to make airport operation more seamless. The system itself serve and integrate activities between airports, passengers, and related aviation stakeholders such as airlines and ground handling. The system and technology implemented on each touch points such as automatic tollgate system, self-check-in, common use check-in system (CUCS), baggage handling system (BHS), Security screening machine (X-ray and body scanner), Flight information display system (FIDS), and automatic flight announcement system. The implementation system follows global best practice and is recommended by the Ministry of Transportation.

Physical Resources

After merger, the headquarter of PT Angkasa Pura Indonesia located within Soekarno Hatta Airport complex in Tangerang. PT Angkasa Pura Indonesia currently manage 37 airports, with 36 airports is PT Angkasa Pura Indonesia assets and 1 airport (Dhoho Airport – DHX) owned by PT. Gudang Garam but managed by PT Angkasa Pura Indonesia. Most of the airport also considered important site for local gateway but also national gateway such as Soekarno Hatta Airport as the national hub of Indonesia, I Gusti Ngurah Rai Airport as international tourism hub, and Sultan Hassanudin Airport as connecting hub for eastern region of Indonesia. Apart from the core airport infrastructure, PT Angkasa Pura Indonesia also owned assets that utilized as supporting facilities either for aircraft operation such as Maintenance Repair Overhaul Facilities (MRO Facilities) and hangar, or for hospitality such as hotel and golf course.

2. Intangible Assets

Human Resources

According to Management Report 2024, PT Angkasa Pura Indonesia have young workforce demographic with 74% from 7.898 total workforce have age below 40. This young workforce also supported by adequate education, 63% of the employee have diploma or undergraduate (S1) education. With young and well educated human resources, enable the organization to be agile enough to keep up with current trend and conduct innovation. PT Angkasa Pura Indonesia also have high concern for human resources capability improvement. For the frontliner such aviation security and customer services, the company have conducted series of Hospitality “Training For Frontliner Leader and Officer across all airports”. For the office employee and managements, PT Angkasa Pura Indonesia conduct gap competency

fulfillment to ensure each employee and management have adequate capability according to their job level.

Brand Resources

Angkasa Pura as a brand have been established since 60 years ago, since the commercialization of Kemayoran Airport – the first public airport in Indonesia. Angkasa Pura have been thru various transformation process but always well known as the leading operator of Indonesia major airports. After the merger of PT Angkasa Pura I & PT Angkasa Pura II, the Angkasa Pura brand become one again with the company name Angkasa Pura Indonesia. Public have higher expectation of Airports managed by Angkasa Pura compare to airports that managed by the Ministry of Transportation.

Reputation Resources

PT Angkasa Pura Indonesia has a good reputation as an operator operator, given by international assessor and compete with other global airport operators. Some of PT Angkasa Pura Indonesia airports have periodically join Airport Council International – Airport Service Quality (ACI-ASQ) measurement with the result in 2024, by total 10 airports obtain 27 awards (Figure IV.2). Moreover 9 airports already obtain Airport Accreditation level 1 or 2 by Airport Council International (Figure IV.3). Additionally, Soekarno Hatta Airport and Ngurah Rai Airport in 2024 get Skytrax recognitions. Soekarno Hatta Airport rated as 4 stars airport and become rank 25th from top 100 world best airports. Ngurah Rai Airport also become number rank 72th from top 100 world best airports (Figure 1).



Figure 1. ACI-ASQ Recognition



Figure 2. ACI Accreditation Recognition



Figure 3. Skytrax Recognition

Capabilities

Table 2. Resource Capabilities

Resource	Capabilities
Financial resources	After merger, in the long term PT Angkasa Pura Indonesia have stronger financial capabilities to be more cost efficient and generate greater revenue.
Organizational resources	Layered organization with role segregations to enable wide span of control and optimum implementation.
Technology resources	Utilization of technology and digital system to make more seamless passenger journey.
Physical resources	Managing 37 airports including all major airports in Indonesia, which also the key gateways of Indonesia air transport.
Human resources	Young and well educated workforce demographic. The frontliners educated with hospitality training. The office employee also get capability improvement thru gap-competency training.
Brand resources	Angkasa Pura brand already well known as leading airport operator in Indonesia with distinctive service quality compare airport that still managed by Ministry of Transportation.
Reputation resource	PT. Angkasa Pura Indonesia have good reputation with international recognition such as ACI-ASQ and Skytrax. Competing with major global airport operators.

Value Chain Analysis

As an airport operator focused on infrastructure and operations, PT Angkasa Pura Indonesia's inbound logistics do not involve procuring raw materials in a traditional sense. Instead, the company relies on various vendors for services like cleaning, maintenance, and system provision, which allows it to concentrate on its core operational and service improvements. The primary operations involve planning, building, operating, and maintaining airport infrastructure to support both the strictly regulated aeronautical business, such as aircraft movements, and the less regulated non-aeronautical business, which includes commercial areas and parking, allowing for creative management.

Regarding outbound logistics, the company's output is not physical goods but services delivered to airlines and passengers through its aeronautical and non-aeronautical operations. Marketing and sales activities are directed towards these two main customer groups, with airline-focused efforts involving route development collaborations and passenger-focused strategies including festive events and international promotions. For non-aero revenues, such as retail and F&B, sales are managed by commercial partners, with performance influenced by factors like passenger traffic and product variety, while the company itself enhances service through regulatory standards and additional initiatives like contact centers and thematic events.

In support activities, procurement is handled by a dedicated unit that ensures efficient, governance-compliant spending for goods and services. Technology management is centralized under an IT department, which oversees all systems, from airport operations to enterprise software, based on requirements from other units. Human resource management, including organizational structure and payroll, is managed by a Human Capital unit, with a strong focus on cultural integration post-merger and a dedicated learning function that drives transformation towards a more customer-oriented, hospitality-focused workforce.

The firm's infrastructure aligns with its strategy, encompassing standard departments like finance, airport operations, and commercial units, alongside specialized functions such as Customer Experience, which aims to make airports represent Indonesia's pride. To manage its widespread operations effectively, the company has established six regional offices that extend headquarters functions, though the Customer Experience role has not yet been integrated at the regional level.

Directional Strategy – Growth Strategy

The merger between PT Angkasa Pura I and PT Angkasa Pura II in shareholder point of view is a corporate strategy to grow by consolidating the portfolio of both companies into one single airport operator company. As a newly merged company, PT Angkasa Pura Indonesia need to set-up the organization direction in order to align with the company vision and strategy. But on the other hand, PT Angkasa Pura Indonesia need to answer the expectation of the shareholders and society to make Airport as the face and pride of the nation meanwhile still have sustainable growth of revenue especially after Covid-19 that shaken the company's financial condition. Therefore, PT Angkasa Pura Indonesia require properly orchestrated strategy in order to achieve the objective in effective and efficient manner.

After the merger process, the portfolio of PT Angkasa Pura Indonesia consists of 37 airports with various financial condition which may affect the ability to execute the business & functional strategy including also strategy related with Customer Experience improvement. Based on the financial performance of each airport in Annual Report 2024, the airport portfolio according to financial performance can be categorized as three condition: 1) Airport with positive EBITDA and Net Income, 2) Airport with positive EBITDA but negative Net Income, and 3) Airport with negative EBITDA and negative Net Income.

Based on the categorization, can be found that 8 airports can be categorized as category 1 with positive EBITDA and Net Income. 9 airports can be categorized as category 2 with positive EBITDA but Negative Net Income. 15 airports can be categorized as category 3 with negative EBITDA and negative Net Income. 5 Airports excluded from this categorization because the airport do not fully owned / operated by PT Angkasa Pura Indonesia, therefore the interpretation will be different compare to airports that fully owned and operated by PT Angkasa Pura Indonesia.

Business Strategy – Broad Differentiation Strategy

The proposed business strategy for PT Angkasa Pura Indonesia for Customer Experience Management to support Non-Aeronautical Business formulated by looking at internal and external analysis. According to the analysis, with various type of airport portfolio the company's most suitable business strategy for customer experience is broad differentiation

strategy. According to Johnson et al, 2008, Broad differentiation strategy is a strategy to provide product or services that offer benefits different from those of competitors and that are widely valued by buyers. This strategy suitable considering various type of airport portfolio with various type of passenger PT Angkasa Pura Indonesia serve.

Formulation of Broad Differentiation Strategy

1. Develop Customer Experience Playbook

According to Ceesay, 2020, integrated customer experience strategy can be implemented with orchestrated Customer Experience Strategy that become the guideline for the functional strategy HR, Services, Marketing, etc. Customer experience playbook developed as the top level guideline and main references for the functional units and each airport to develop the customer experience improvement program that well-coordinated and align with the company vision and objective. PT Angkasa Pura Indonesia itself already clearly mention the customer experience strategy in the company vision “To Become a world-class airport operator, connecting global travelers with distinctive Indonesian Hospitality”. This vision clearly emphasizes the company vision regarding to customer experience to connect the passenger seamlessly during their journey at the airport and deliver distinctive Indonesian hospitality culture which can't be found anywhere else.

The playbook will consist comprehensive guidance elements to enable integrated Customer Experience Management such as:

1. The general understanding of Airport Customer Experience that the company want to aim. This part is essential to ensure all part of organization aware the definition of customer experience and the objective of Customer Experience at PT Angkasa Pura Indonesia Airports. This part also emphasizes the relatedness between company vision, objective, and expectation of delivery from the various functional units.
2. The customer experience elements of the airports which can be categorized based on 3P (people, process, and premises) category. By categorizing the customer experience element, the functional units will be easier to understand their general role and responsibilities in customer experience improvement.
3. The implementation stages guideline of Customer Experience. With various airport financial capabilities. The guideline may help the airport to prioritize and match the airport capabilities with customer experience implementation. This implementation part also possibly embedded with customer experience regarding to commercial activities especially non-aero business, to ensure strategy alignment.
4. The measurement method of the customer experience. There are various measurement programs applied at the airports such as Skytrax, ACI-ASQ, CSI, etc. This information is essential to build awareness of how the customer experience at the airport being measured (Bunker, 2024).
5. This playbook also essential to become the roadmap to ensure alignment of Customer Experience program with the company long term target.

2. Develop Airport Cluster and Improvement Prioritization

Each airport has various strengths and weaknesses, including also the touch points that can deteriorate passenger satisfaction and also hinder them to shop at the airports. Among all

of that factor, there are customer experience factors that purely under control of PT Angkasa Pura Indonesia as airport operator and also factor that within business partner or airport stakeholders control. For example, experience at check-in area which affected by the service quality of ground handling and airline. Additionally, each airport also has different financial capability to enhance the customer experience. According to Table IV.13, airport category 2 and 3 will have difficulties to implement sophisticated Customer Experience program because the airport need to balance the financial condition which still in unhealthy condition.

To ensure each airport have baseline regarding to customer experience improvement, it is essential to have airport customer experience standard based on cluster which can be adopted from the financial condition. Airport with healthy financial condition need to conduct customer experience improvement not only for basic customer experience but also iconic customer experience which implemented on several touch points by the form of People, Process, and Premises including also supporting of high end technology. On the other hand, airport with unhealthy condition with negative EBITDA and net profit need to ensure efficiency on delivering basic costumer experience. This airport clustering can be embedded in the Customer experience playbook.

Improvement prioritization is also essential as part of airport cluster strategy. Improvement prioritization will guide the airport to plan the improvement program and will be very helpful for airport with limited financial power. Prioritization can be based on category of situation whether it disruption of mandatory operational standard requirement in a touch point or complementary aesthetic suggestion. Complaint from Voice of Customer also is very important, because the information given there can also become the input for improvement program development.

3. Align Customer Experience Function in Regional Office

Customer experience unit head office being burdened high expectation to design, develop, measure, and orchestrate improvement programs that to answer the company objective. However, customer experience team still lack of extended hand in region office to answer the customer experience agendas can be implemented properly on each airport branch offices. This condition happens due to no specific function regarding to Customer Experience at region office or airport branch offices. It is essential to set up customer experience function at least in the region to guide and monitor customer experience implementation at each airport. This function also essential to ensure Customer Experience unit can be more focus on strategic matter due to the quality control and management conducted by customer experience function at region office.

4. Develop Airport Customer Experience Community

Airport can be considered an ecosystem where complex system with various stakeholder operate together to deliver air transport activities. Airport operator itself such as PT Angkasa Pura Indonesia do not full control over other entity within the airport ecosystem apart from the mandatory operation regulations issued by the government. Therefore, in order to develop integrated customer experience across airport ecosystem require softer approach. Building airport customer experience community can become the alternative solution based on more informal approach but yet still structured. This Airport customer experience community also

will align with the ACI's airport customer experience element s which is airport community collaboration and airport culture. This ecosystem will enable airport to pioneer collaboration between ecosystem member such as airlines, business partner, customs, immigration, etc. This community can become a platform to discuss and share matters related with customer experience improvement at the airport. Additionally, this community also can become a platform to develop customer centric culture by give award for excellent act by the frontliners and conduct joint training in customer experience. This community itself can be very dynamic according to the character of each airport.

5. Technology Implementation for Seamless Journey

According to quantitative research, no adequate time before boarding the top condition that hinder the passenger to spend before boarding. This condition may require improvement by implementation of technology. The role of technology itself have already mentioned in the PT Angkasa Pura Indonesia strategic house as enabler for all transformation theme. There are various technology that may help to speed up the passenger processing process such as implementation of parking guidance system (PGS) to make the customer easier to find empty parking lot, implementation of Automated Tray Return System (ATRS) in the Xray Machine for faster tray return in the security check point, and also implementation of self bag-drop to enable the passenger drop their baggage by their self without queuing at the check-in counter. But technology implementation require cost which not all airport can afford. This implementation also may just effective for big airport with congestion risk on peak hour which hardly can be solved by just add more officers. During technology implementation also require active consultation and participation by regulator to ensure the solution comply with the regulation.

6. Partnership for Airport Supporting Facilities

Airport facilities is one of the most important part of the airport. Apart from the core operation facilities, there are supporting facilities that play important role to ensure satisfaction for the passenger such as public master clock, kids' playground, nursery room, smoking room, etc. But to develop exceptional support facilities require extensive amount of budget. The development of facilities hardly become priority due to not core operation facilities and also can't directly converted into commercial value to gain revenue. With the development method of promotion, brands advertise their product in more creative method apart from traditional physical advertising. Promotion in public facilities has become one of the trends to immerse the product within facilities. Airports are one of the potential places with thousands to millions of eye views per year. With this mutual interest, Airport can partnership with brands to develop signature airport supporting facilities via sponsorship scheme. This sponsorship also can be developed to give financial benefit for the airports which can be considered as additional non-aeronautical revenue. With multiple airports portfolio, PT Angkasa Pura Indonesia have various option to be offered for the brands. Some airports around the world have implement the method such as wall clock by Rolex implemented at Frankfurt Airport.

7. Integrated promotion program

Promoting airport facilities and services at the airport is a mandatory for airport operator to ensure the customer aware. Some airports also start to elevate the service by conducting thematic events. On the other hand, business partners operate their outlets as usual without any deep integration with the airport program.

This activity has potential to be integrated with to business partners which also need support for marketing either thru online channel or directly in the airport. For big airports with adequate marketing budget and have big brands operate at the airport, it is possible to extend the integrated promotion by creating marketing fund committee. With this marketing fund airport and business partners can create extraordinary campaign with shared budget in order to create commercial impact with more efficient budget meanwhile also can improve experience at the airport. Promotion program also can be extended with external partners which can bring benefit to expose airport facilities and hospitality. Incheon airport is one of the example that have conducted both initiatives, conduct joint marketing committee with duty free operators under Airstar Avenue program and promote Incheon Airport brand by supporting K-Drama film with the key theme of Incheon Airport.

Implementation Plan

For the implementation timeline, the first step is to ensure all of the organization have similar guideline for the Customer Experience Development. When the guideline along with airport clustering, prioritization, and regional offices customer experience function established in place, all related functional units can prepare the supporting program relate with the guidance. This program will enable further activities.

The second step after internal alignment finished is to develop the customer experience community with airport stakeholders. With this community improvement also can be more align which also can help technology implementation beyond normal practice easier to implement. Once the airport customer experience community is well established, the third stage itself can be implemented in parallel to generate revenue from customer experience improvement activities such as facilities partnership and integrated promotion program.

Table 3. Implementation timeline

No	Activity	2025		2026		2027					
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Develop customer experience playbook										
2	Develop airport cluster and improvement prioritization										
3	Align customer experience function in regional office										
4	Develop airport customer experience community					•	•	•	•	•	•
5	Technology implementation for seamless journey					•	•	•	•		
6	Partnership for airport supporting facilities					•	•	•	•	•	•
7	Integrated promotion program					•	•	•	•	•	•

CONCLUSION

This research, through surveys, interviews, internal-external analysis, and SWOT/TOWS matrices, revealed that customer experience at airports encompasses the entire pre-journey, on-journey, and post-journey, with each touchpoint influencing passengers' willingness to shop or

spend—particularly check-in and boarding lounges, due to the role of adequate pre-boarding time. Importance-performance analysis showed gaps across all touchpoints, underscoring the need for improvements to meet customer expectations. For PT Angkasa Pura Indonesia, a newly established entity managing a vast airport portfolio as the nation's pride, aligning its customer experience vision with practical organizational guidance is essential to integrate functional strategies, enabling service enhancements that boost both experience and non-aeronautical revenue. Future research could longitudinally track the impact of these implemented strategies on revenue metrics post-rollout across diverse airport sites.

REFERENCES

Airport Council International. (2023). *Airport economics 2023 report*.

Aprilia, Z. (2024, December 5). RI kekurangan pesawat, Erick Thohir jajaki kerja sama dengan Boeing. *CNBC Indonesia*. <https://www.cnbcindonesia.com/market/20241205131529-17-593647/ri-kekurangan-pesawat-erick-thohir-jajaki-kerja-sama-dengan-boeing>

Ayutthaya, D. H. Na., & Koomsap, P. (2019). Improving experience clues on a journey for better customer perceived value. In *Transdisciplinary engineering for complex socio-technical systems* (Vol. 10, pp. 53–62).

Badan Pusat Statistik. (2025, February 5). *Indonesia's economic growth 2024 was 5.03% (c-to-c); Q4 2024 was 5.02% (y-on-y) and 0.53% (q-to-q)*. [https://www.bps.go.id/en/pressrelease/2025/02/05/2408/indonesia-s-economic-growth-2024-was-5-03-percent--c-to-c---indonesia-s-economic-growth-in-q4-2024-was-0-53-percent--q-to-q-.html](https://www.bps.go.id/en/pressrelease/2025/02/05/2408/indonesia-s-economic-growth-2024-was-5-03-percent--c-to-c---indonesia-s-economic-growth-in-q4-2024-was-5-02-percent--y-on-y---indonesia-s-economic-growth-in-q4-2024-was-0-53-percent--q-to-q-.html)

Barakat, H., Yeniterzi, R., & Martin-Domínguez, L. (2021). Applying deep learning models to Twitter data to detect airport service quality. *Journal of Air Transport Management*, 91, Article 102003. <https://doi.org/10.1016/j.jairtraman.2020.102003>

Batouei, A., Iranmanesh, M., Mustafa, H., Nikbin, D., & Teoh, A. P. (2020). Components of airport experience and their roles in eliciting passenger satisfaction and behavioural intention. *Research in Transportation Business & Management*, 37, Article 100585. <https://doi.org/10.1016/j.rtbm.2020.100585>

Beifert, A. (2016). Role of air cargo and road feeder services for regional airports: Case studies from the Baltic Sea region. *Transport and Telecommunication*, 17(2), 87.

Bezerra, G. C. L., & Gomes, C. (2019). Determinants of passenger loyalty in multi-airport regions: Implications for tourism destination. *Tourism Management Perspectives*, 31, 145–158. <https://doi.org/10.1016/j.tmp.2019.04.003>

Boyles, M. (2022). *What is business strategy*. <https://online.hbs.edu/blog/post/what-is-business-strategy>

Brocklebank, K. (2022). *Travel retail: The insider's guide*. One Red Kite.

Bruin, L. de. (2016). *VRIO—From firm resources to competitive advantage*. <https://www.business-to-you.com/vrio-from-firm-resources-to-competitive-advantage/>

Budd, L., Ison, S., & Budd, T. (2016). Improving the environmental performance of airport surface access in the UK: The role of public transport. *Research in Transportation Economics*, 59, 185–195.

Bunker, A. (2024). *Net promoter score*. <https://www.qualtrics.com/experience->

management/customer/net-promoter-score/

Ceesay, L. B. (2020). Building a high customer experience management organization: Toward customer-centricity. *Jindal Journal of Business Research*, 9(2), 162–175. <https://doi.org/10.1177/2278682120915414>

Choi, J. H., & Park, Y. (2022). Exploring passenger and flight characteristics' impacts on airport retail income: Evidence from Incheon International Airport. *Journal of Retailing and Consumer Services*, 66, 102913.

Coll, D. (2019). *Airport customer experience: Between management and execution*. <https://blog.aci.aero/customer-experience/airport-customer-experience-between-management-and-execution/>

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.

David, F. R. (2011). *Strategic management: Concepts and cases*. Prentice Hall.

Davitt, D. (2012). *Frankfurt strikes sponsorship deal with luxury watch brand Rolex*. <https://moodiedavittreport.com/media-frankfurt-strikes-sponsorship-deal-with-luxury-watch-brand-rolex/>

Jorge-Calderón, D. (2016). *Aviation investment: Economic appraisal for airports, air traffic management, airlines and aeronautics*. Routledge.

Price, J., & Forrest, J. (2016). *Practical airport operations, safety, and emergency management: Protocols for today and the future*. Butterworth-Heinemann.

Wilke, S., Majumdar, A., & Ochieng, W. Y. (2014). Airport surface operations: A holistic framework for operations modeling and risk management. *Safety Science*, 63, 18–33.

Yadav, D. K., & Nikraz, H. (2014). Implications of evolving civil aviation safety regulations on the safety outcomes of air transport industry and airports. *Aviation*, 18(2), 94–103.