

New Business Strategy to Grow The Logistic Integrated System of The Business Portfolio: Case of PT Angkasa Pura Kargo

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ABSTRACT: PT Angkasa Pura Kargo (APK) is a company that provides cargo handling services at airports in Indonesia. The fragmented logistics sector faces competition from domestic and international players, but it benefits consumers with competitive pricing and improved services. APK's business portfolio operates within the dynamic landscape of the logistics industry, striving to provide efficient and reliable services while navigating the competition. This research aims to propose a new business strategy to grow the Logistic Integrated System of the Business Portfolio of APK. The author uses qualitative research through in-depth interviews to gain a comprehensive understanding of a complex subject. The study applied the Strategy Diamond Framework and concluded that APK should establish Integrated Logistics Services as a new business line as part of Logistic Integrated System Business Portfolio. The author proposed that APK implement a three-stage plan to digitize operational activities, develop advanced systems, and establish strategic collaborations. The first stage focuses on digitizing operational activities, reducing errors and improving efficiency. The second stage involves investing in an advanced SIGO system and TERKA Application, facilitating internal and external integration. The third stage involves establishing strategic partnerships with a larger network to support sales, marketing, and distribution activities.

KEYWORDS: Grow, Integrated Logistics Service, Logistic Integrated System, New Business Strategy, PT Angkasa Pura Kargo

I. INTRODUCTION

One of the goals the aviation industry's value chain is comprised of a diverse set of industries in terms of size, structure, and performance, including airlines, airports, cargo and freight forwarders, caterers, ground handlers, MRO (maintenance, repair, and overhaul), global distribution systems, original equipment manufacturers, aircraft lessors, and air navigation service providers. According to International Air Transport Association (IATA) [1] data, the aviation sector will lose USD 146 billion in 2021 across the value chain. Airlines suffered the greatest losses, totalling roughly USD 104.1 billion. Airports are the second most profitable sector, with losses of approximately USD 34.3 billion due to higher proportions of fixed costs, which resulted in higher losses when compared to those with more variable cost bases, such as ground handlers. In 2021, the only bright spot for the value chain was the air cargo carriers and freight forwarders sector, which generated an economic profit of roughly USD 6.8 billion.



Figure 1. Economic profit/loss by subsector, 2021, USD Billion (IATA, 2022)

According to IATA statistics [2], e-commerce has changed the way air cargo works. 59% of e-commerce shippers claim air freight only partly meets their needs. One of the main problems is the slow

adoption of digital communications, which results in a lack of visibility and openness. To satisfy current and future customer needs, air cargo companies must develop a strategy for implementing new technology while maintaining operational standards in an agile and scalable way. According to AC Venture research [3], the Indonesian e-commerce market has grown at a rate of more than 80% CAGR over the last five years, and it is projected to reach USD 97 billion by 2025, indicating a 27% CAGR. This upbeat prediction is influenced by the increasing Indonesian middle class and the country's current internet penetration of more than 60%. Despite its market potential, Indonesia's logistics and supply chain industry faces several challenges due to the country's geography, which necessitates the use of multimodal transportation: road, rail, sea, and air. The lack of an interconnected infrastructure, on the other hand, increases the cost of delivery, particularly for regions outside of Java, because it stops them from participating in an equal distribution of goods, which raises the price of those goods due to scarcity. As a result, several logistics startups started to enter the freight or trucking industry, utilizing technology to address these challenges.

APK operates three business portfolios: cargo service, logistic infrastructure, and logistic integrated systems. The core business of APK is cargo services, with the main activity being operating and managing airport warehouses. APK has two supporting business portfolios: logistic infrastructure, which provides warehouse facilities for operational activities, and a logistic integrated system for digitalization. APK's revenue has increased since its founding in 2016, driven by increased warehouse operations and project logistics. However, Logistics Integrated Systems has not improved their contribution, with the largest revenue contribution from logistics integrated systems being only Rp 4.6 billion in 2018. The anticipated revenue for logistics integrated systems is only Rp 0.5 billion in 2022, representing only 0.5% of the total anticipated revenue. Logistic Integrated System has shown declining revenue since 2019, mainly due to discontinued main products and unprogressive sales results in other revenue streams.

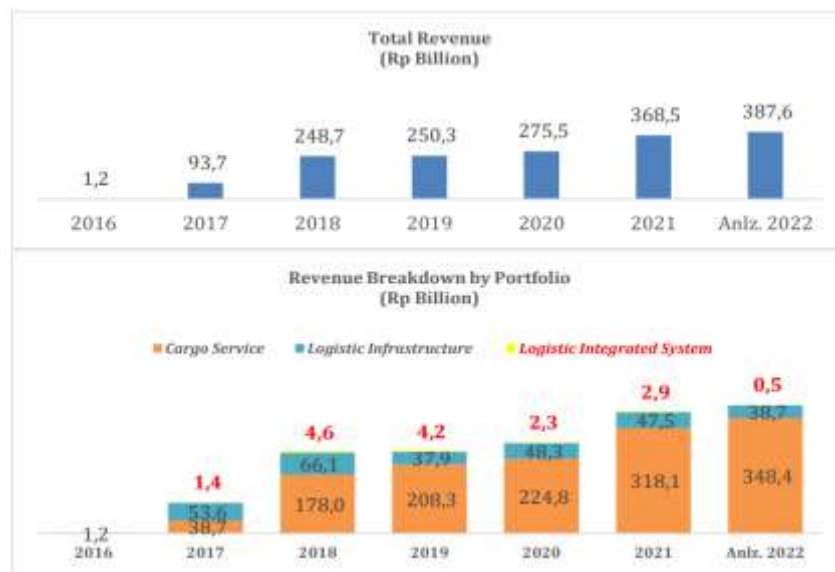


Figure 2. Business Portfolio Revenue 2016-2022 (PT Angkasa Pura Kargo Internal Report, 2022)

This research objective aims to propose a new business strategy for APK's Logistics Integrated System to grow its business portfolio. The study will address the company's current business situation, challenges faced, and the proposed new strategy. The top management of APK will create a new business strategy to increase total annual revenues and implement the strategy as recommended. The proposed strategy will help APK maintain its competitive advantage and ensure the company's continued growth.

II. RESEARCH METHOD

The author conducts qualitative research to gain a deeper understanding of the topic because it requires a complex and in-depth comprehension of the subject. Creswell and Poeth (2016) [4] explained that qualitative research enables the author to collaborate directly with participants by involving them as active collaborators in the research process and co-creating knowledge that can inform the research question. To support this research, the author uses both primary and secondary sources of information. The primary data for this study was collected through in-depth interviews conducted with 25 individuals who are experts in the company and industry. For secondary data, the author will be gathered from an unpublished internal report of APK. Besides, secondary data is also collected from references such as books, articles, publications, research papers, and other reliable publications. In-depth interviews provide a more in-depth examination of the perspectives and experiences of participants, allowing for clarification and elaboration. Moreover, in-depth interviews can facilitate the development of rapport and trust between the researcher and the participant, leading to more insightful responses. In the opinion of the author, in-depth interviews can be useful for investigating and exploring issues and aspirations for the APK case.

III. RESULT AND DISCUSSION

Business Situation and Market Competition

APK operates two businesses in its Logistic Integrated System portfolio: the Warehouse Management System (SIGO) and the Internet and Connection Service. The SIGO system is developed by APK as an internal system to establish a link with the AP2 airport system, allowing AP2 to retrieve cargo data. However, it is restricted to the airport territory of AP2, and 90% of the total portfolio revenue is contributed by the SIGO business. The author highlights the significant role of AP2 as an airport operator and its status as the parent company of APK.

The Logistics Integrated System business faces several internal challenges, including the significant influence of AP2 in determining its policies, which in turn affects the commercialization of the airport region and operational operations. The current management perspective is risky and expensive to explore business outside airport area, as it is heavily dependent on airport warehouse handling business, which contributes almost half of the Company's total revenue. Administrative and operational processes are not completely digitized, and the Logistics Integrated System business from a structural perspective is outside business unit nomenclature.

The air cargo industry's market share is constituted of numerous local entities, with APL, Lion Air, Garuda, Poslog, and RPX being the top five competitors. The author's analysis reveals that participants in the air cargo logistics industry have developed innovative revenue-generating strategies to facilitate their operations.

The flow of the air cargo system consists of the customer (shipper), cargo sales agent services, regulated agent, warehouse origin, air freight, warehouse destination, customer (consignee), and TPS online

	Shipper and Freight Forwarder	Cargo Sales Agent	Regulated Agent	Airport Warehouse	Air Freight	Delivery Service
	Partnership	Selling airlines airway bills	Self Operate	18 Warehouse located in West Sulawesi	Partnership for charter flight	Partnership
	Partnership	Selling airlines airway bills	Self Operate	17 Warehouse located in East Indonesia	Partnership for charter flight	Partnership
	Operate through subsidiary (Aerjasa Cargo)	Selling own airway bills	N/A	Only at CGK	Own the asset	Operate through subsidiary (Aerjasa Cargo)
	Operate through subsidiary (Lion Parcel)	Selling own airway bills	N/A	Only at CGK	Own the asset	Operate through subsidiary (Lion Parcel)
	Own the asset	N/A	N/A	Only at CGK	N/A	Own the asset
	Own the asset	N/A	N/A	Only at CGK	N/A	Own the asset

system. The flow system indicates that APK does not yet have an integrated system for its operations.

Figure 3. Flow of Air Cargo System

The analysis highlights the need for APK to develop a more integrated logistics system to better serve its customers and maintain a competitive advantage in the air cargo value chain.

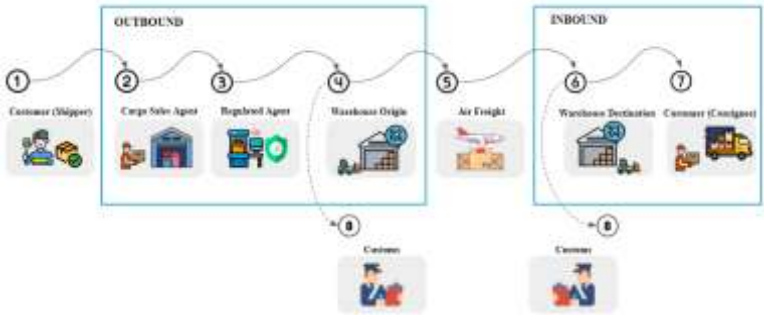


Figure 4. Flow of Air Cargo System

Approach to Increase Revenue

Logistics Integrated System is a business portfolio that aims to digitize and integrate operational activities and services from the portfolio of cargo service providers. This integration serves as the Engine of Business Transformation, enabling APK to provide Integrated Logistics Service. The integration of the company's services will extend beyond the service systems themselves and encompass operational activities, improving the quality of service at the Hub and enhancing overall performance of both the Hub and its associated branches.

APK's Board of Directors acknowledges the potential for optimization within APK's air cargo value chain, aiming to optimize operational efficiency and performance across other APK branches. The CGK region, as the primary hub for Indonesia, has emerged as a highly competitive business hub for APK, with a diverse range of services offered and numerous competitors. The formulation of a pricing strategy holds significant importance in the context of bundling services.

APK can collaborate with shipping companies that have direct access to major clients, form agency partnerships with new airlines and charter aircraft operators and apply for modifications to the concession imposition scheme on regulated agent income to reduce costs in the chain. Additionally, APK has the potential to collaborate with ground handling operations to optimize cost-effectiveness within the domain of warehouse handling services, enhancing APK's operational cost efficiency and enabling competitive premium prices while maintaining high service quality.



Figure 5. Integrated Logistics Service: Optimize Air Cargo Value Chain

The Integrated Logistics Service will become a critical driver of business transformation for APK, as it will become a critical driver of business transformation. To successfully implement the launch of the Integrated Logistics Service, APK must engage in external integration with parties pertinent to both the system and its business operations. The Business Development unit has been designated as the primary driver of the new line

of business, Integrated Logistic Service, based on the organization's core functions and responsibilities. The Integrated Logistics Service initiative aims to streamline the logistics process by integrating various systems and applications. The main components of the system include warehouse management, airport management, shipper and freight forwarder collaboration, customs, cargo sales agents, registered agents, air freight, and financial services. The Logistics System department will collaborate with the Business Solution and Business Improvement departments to create a digital transformation of all operational activities related to cargo sales agents.



Figure 6. Integration to External System

The TERKA Application will serve as the primary interface for retail agents and customers to initiate orders for Integrated Logistics Services. The integration of the TERKA Application with the SIGO system will require the involvement of Corporate Finance Units. The ERP system will be integrated with the TERKA Application and SIGO system, ensuring that the necessary information is captured and processed efficiently.

Administration will be a collaborative effort between business units and corporate finance units to verify cargo handling, requiring significant human resources allocation. The ERP system will produce invoices that can be modified based on the issuance period, adhering to tax regulations in Indonesia. Payment services will be integrated into the ERP system, enabling automatic generation of financial reports and real-time monitoring of financial performance through a performance dashboard. In conclusion, Integrated Logistics Service initiative aims to streamline the logistics process by integrating various systems and applications, ensuring efficient and effective management of cargo and logistics.

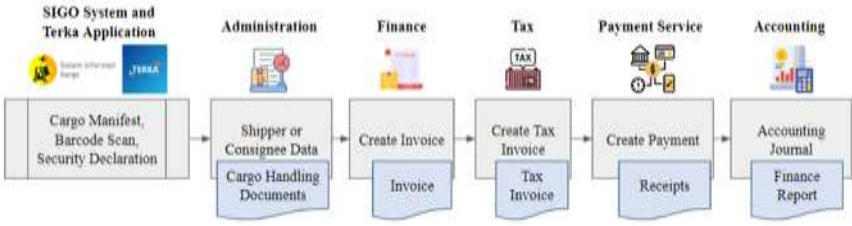


Figure 7. Integration in Internal System

Recommendations for New Business Strategy

The Strategy Diamond is a robust model that assists APK in analysing and aligning their strategies across multiple dimensions to achieve sustainable growth [5]. It is crucial to have a thorough understanding of the Strategy Diamond framework to propose an effective business solution. In this section, the author provides a comprehensive overview of the Strategy Diamond and describes its five essential components: Arenas, Vehicles, Differentiators, Staging, and Economic Logic.

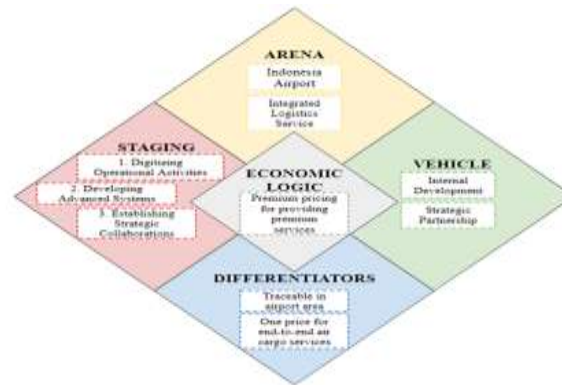


Figure 8. New Business Strategy for Logistic Integrated System Business Portfolio

Arena

APK will introduce Integrated Logistics Service as a new business line within the Logistics Integrated System business portfolio, which will provide end-to-end logistics services for customers. The development of SIGO system and TERKA application will be utilized in the launch of the new business line, which will make use of existing internal resources. As part of its geographic coverage, APK targeted air cargo market, specifically the airport area. It chose to strengthen APK's core competency in the air cargo value chain while also acknowledging that APK need full support from AP2 as airport operator and parent company.

Vehicles

APK has made the strategic decision to broaden its scope of services. APK intends to achieve its objective through the utilization of organic or internal product development for the purpose of integrating its operations and systems. Then, APK employs other vehicle, such as strategic partnerships, to achieve a broader network and a stronger presence in every airport branch area.

Differentiators

APK will develop the best combination of differentiators that can give the company a significant competitive advantage. First, APK uses its service and technology to develop service to trace cargo in airport area. This providing customers with transparency and visibility for incoming and outgoing cargo. Second, APK further differentiates through a distinctive, one price for end-to-end air cargo services, to offer competitive premium prices while maintaining a high level of service quality. There are better logistic providers than APK, and there are cheaper services than APK; however, many customers believe that APK's integrated logistics service offers the best value—quality for the price—in the air cargo industry. The company has worked hard to build and strengthen its strategic position.

Staging

Stage 1: Digitizing Operational Activities

The first stage of the plan focuses on digitalizing the operational activities across the current business units. This step is crucial because many of the operational processes are currently handled manually, hindering efficiency and productivity. By embracing digitalization, APK aims to create a culture that values and utilizes digital tools and technologies. This will streamline operations, reduce errors, and enhance overall performance.

Stage 2: Developing Advanced Systems

In the second stage, APK will invest in the development of an advanced SIGO system and TERKA Application. These technological advancements will play a vital role in facilitating both internal and external integration. SIGO system will enable smooth coordination and communication among various departments within the company, ensuring efficient workflow and collaboration. TERKA Application, on the other hand, will enhance external integration by providing a user-friendly platform for customers and partners to interact, place orders, and track shipments seamlessly.

Stage 3: Establishing Strategic Collaborations

In the final phase of the strategy, APK will establish strategic partnerships with a larger network to facilitate service delivery and increase its customer base. Through these partnerships, APK aims to concentrate

on its core business while leveraging expertise and resources of its partners. This strategic approach will enable the APK to build flexible and wide-ranging networks that support sales and marketing, as well as operational and distribution activities. By forging alliances, the APK can tap into new markets, attract more customers, and ultimately grow its business.

Economic Logic

APK is proposing a Premium pricing strategy to offer high-quality services, improving operational cost efficiency. This approach allows APK to set competitive premium prices while maintaining high service quality. By aligning service offerings with customer value, APK aims to strike a balance between cost-effectiveness and service excellence, ultimately enhancing its market competitiveness. Building upon the analysis conducted using the Strategy Diamond framework, Fig. 8 presents the proposed new business strategy for growth. It highlights the key elements of the strategy, including the identified arenas, selected vehicles, differentiators, staging and pacing, and economic logic.

IV. CONCLUSION

APK's Logistics Integrated System portfolio business includes the Warehouse Management System (WMS) and Internet and Connection Service Business. The SIGO system, developed to link with AP2 airport, is currently in use but has limited usage. APK faces competition from APL, Lion Air, Garuda, Poslog, and RPX in the air cargo industry. APK's competitive advantage lies in its warehouse operator and regulated agent value chain, while competitors have experienced rapid development in logistics integrated systems services.

APK's Logistics Integrated System faces internal challenges, including policy limitations, heavy dependence on airport warehouse handling, limited digitization, lack of sales and marketing efforts, and insufficient human resources. These challenges limit the system's visibility, growth potential, and customer attraction. Business competition includes advanced logistics integration from airline competitors and competitors with wider networks and comprehensive services. APK's business portfolio faces challenges in maintaining its competitiveness and addressing these issues to improve its logistics Integrated System.

APK will introduce Integrated Logistics Service as a new business line within its Logistics Integrated System portfolio, offering end-to-end logistics services. The business line will utilize the SIGO system and TERKA application, utilizing internal resources. APK must concentrate on establishing strategic collaborations with a broader network to facilitate service provision and expand its customer base. APK targets the air cargo market, specifically the airport area, to strengthen its core competency in the value chain. APK seeks full support from AP2 as airport operator and parent company.

APK will implementing a three-stage plan to digitize operational activities, develop advanced systems, and establish strategic collaborations. The first stage focuses on digitizing operational activities, reducing errors and improving efficiency. The second stage involves investing in an advanced SIGO system and TERKA Application, facilitating internal and external integration. The third stage involves establishing strategic partnerships with a larger network to support sales, marketing, and distribution activities. This approach enables APK to tap into new markets, attract more customers, and grow its business.

REFERENCES

- [1]. International Air Transport Association (2022). Understanding the pandemic's impact on the aviation value chain
- [2]. International Air Transport Association (2020). The e-Commerce Impact on Air Cargo Operation
- [3]. AC Venture (2020). Logistics Landscape in Indonesia, Sector Research.
- [4]. Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.
- [5]. Hambrick, D. C., & Fredrickson, J. W. (2005). Are you sure you have a strategy?. *Academy of Management Perspectives*, 19(4), 51-62.

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