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# Optimizing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport

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Abstract: Article on optimizing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport within the scope of marketing management science. This article aims to create hypotheses regarding the relationship between factors, which can then be used for further research in the field of human resource management. The research method used in this research is descriptive qualitative. The data used in this research comes from previous research which is still relevant to the current investigation. Data was collected from leading academic online platforms, including Publish or Perish, Google Scholar, digital reference books, and Sprott journals. The results of this literature research include: 1) The airport security system has an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport; 2) Terminal layout has an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport; and 3) Tenant promotions have an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport.

**Keyword:** Increase in Non-Aeronautical Revenue, Airport Security System, Terminal Relayout, Tenant Promotion.

# **INTRODUCTION**

Optimizing non-aeronautical revenue at Tjilik Riwut Airport in Palangka Raya is a critical step toward increasing efficiency and diversifying airport revenue streams. The context for this issue focuses mostly on the untapped potential for revenue generation from non-direct flight operations, such as retail, consumer services, and other commercial activities. Tjilik Riwut Airport, being the primary gateway to and from Central Kalimantan, is in a vital position to help local and regional economic development. However, aeronautical operations, such as landing fees and aircraft services, have traditionally dominated airport revenues, which can be heavily influenced by fluctuations in the aviation industry as well as other external factors such as global economic conditions, regulatory changes, and political dynamics. In this perspective, non-aeronautical revenues provide a better long-term path to revenue stability and are less vulnerable to aviation industry instability.

Optimising non-aeronautical revenue at Tjilik Riwut Airport entails finding and developing numerous possible revenue sources. This could involve upgrading retail facilities, growing commercial districts, offering efficient parking services, improving food and beverage services, and making better use of advertising space. The purpose is to provide a great experience for airport users, consequently driving spending within the airport and enhancing customer satisfaction. Furthermore, greater usage of digital technologies such as mobile airport service applications, paid Wi-Fi, and interactive information kiosks can assist improve the customer experience while also creating new revenue opportunities. Airports can also work with third parties to create new business models that include commercial activities within the airport environment, such as airport hotels, convention centers, and entertainment.

However, non-aeronautical revenue optimization is not without its obstacles. This involves the need to balance investment with possible returns, manage space and resources, and ensure service quality and security. Furthermore, strategies must be tailored to the unique characteristics of the local market and consumer preferences, as well as competition from similar businesses outside of the airport. To summarize, optimizing non-aeronautical revenue at Tjilik Riwut Airport necessitates a comprehensive approach that incorporates innovation, service quality, and customer satisfaction. This endeavor will not only assist the airport lessen its reliance on aeronautical earnings, but will also strengthen its position as a hub for economic and social activity in Palangka Raya, contributing positively to overall regional economic growth.

Based on the background of the problem above, the problem formulation is determined as follows: 1) Does the Airport Security System have an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport?; 2) Does Terminal Relayout have an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport?; and 3) Does Tenant Promotion have an effect on increasing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport?.

#### **METHOD**

Reviews of the Literature Methodologies including systematic literature review (SLR) and library research were employed in the article's preparation. Qualitative evaluation was conducted on the methods, and their accessibility was confirmed by consulting reputable scientific web sources such as Mendeley and Google Scholar (Susanto et al., 2023). A systematic literature review (SLR) is a meticulous and methodical undertaking wherein all pertinent research literature is identified, evaluated, and scrutinized in order to provide an answer to a particular research inquiry. It is vital, when conducting qualitative analysis, to consistently implement the literature review in accordance with methodological assumptions. Due to its investigative nature, qualitative analysis is predominantly conducted for this purpose, (Ali, H., & Limakrisna, 2013).

## RESULTS AND DISCUSSION

### **Increase in non Aeronautical Revenue**

Non-aeronautical income creation refers to airport methods for increasing revenue streams other than direct flight operations, such as passenger and aircraft services. This includes earnings from shopping, space renting, parking, restaurants, and other non-aviation facilities. The idea is to provide a more stable revenue stream and diversify revenue streams, allowing airports to be less affected by aviation sector volatility. This growth can be done by expanding commercial areas, enhancing services and facilities, and innovating in marketing and digital services (Yokomi et al., 2017).

The indicators or dimensions contained in increasing Non-Aeronautical income are as follows: 1) Diversification of Revenue Sources: This metric assesses how far an airport has

expanded its revenue streams outside airline operations, such as shopping, restaurants, and space renting; 2) Revenue Per Passenger: Displays the average revenue made by each passenger who uses the airport, allowing you to measure the effectiveness of your revenue production efforts; 3) Commercial Space Utilization: Determine how successfully airports manage and use commercial space to maximize revenue; and 4) Tenant Satisfaction: Assesses tenant satisfaction with commercial space at airports, suggesting service quality and ongoing revenue potential (Agustian et al., 2023).

The Non-Aeronautical Income Increase variable has been studied by previous researchers, including: (Lucas, 2022), (Agustian et al., 2023), (Karma, 2019), (Pambudi et al., 2022), (Majid et al., 2021), (Marina et al., 2023), (Sitorus et al., 2018), (Ricardianto et al., 2023), (Ayodeji et al., 2023), (Zuniga & Boosten, 2020), (Choi et al., 2024), (Satish et al., 2023).

# **Airport Security System**

An airport security system is a collection of procedures, technology, and practices intended to protect an airport and its users against threats and criminal activity. This includes stringent control over terminal access, passenger and baggage scanning, securing the runway and apron areas, and preventing terrorism, criminality, and other security incidents. An successful security system combines advanced technology, such as body scanners, metal detectors, and surveillance cameras, with tight training and protocols for security personnel. Maintaining airport security is a primary responsibility, not just for passenger and crew safety, but also for seamless flight operations (Novita et al., 2020).

The indicators contained in the airport security system are as follows: 1) Security Incidents: Counts the number of security incidents that occur to assess the effectiveness of the airport's security system; 2) Security Response Time: This metric determines how quickly airport security teams respond to threats or incidents, demonstrating operational readiness and efficiency; 3) Investment in Security Technology: Determines the extent of airport investment in advanced security technologies, indicating a commitment to security; and 4) Security Personnel Training and Certification: Evaluate the quality and frequency of training provided to security personnel, including any certificates held (Hartono et al., 2020).

Airport Security System variables have been studied by previous researchers, including: (Astuty et al., 2023), (Satish et al., 2023), (Novita et al., 2020), (Keke & Susanto, 2019), (Susanto et al., 2021), (Susanto et al., 2020), (Susanto & Keke, 2020), (Hartono et al., 2020).

# **Terminal Relayout**

Terminal relayout is the process of redesigning the interior layout of an airport terminal to improve operational efficiency, passenger throughput, and customer experience. This relayout may result in modifications to check-in locations, security zones, waiting areas, retail, and other passenger services. The goal is to improve navigation, reduce wait times, and guarantee that facilities suit passenger demands while increasing income possibilities. Layout changes are frequently motivated by increases in passenger traffic, changing corporate requirements, or the need to accommodate new technologies (Dirayat et al., 2020).

The indicators on the relayout terminal are as follows: 1) Passenger Flow Efficiency: Determines how smoothly passengers move through the terminal, including wait times at check-in, security, and boarding; 2) Passenger Capacity: Determines the terminal's ability to accommodate passengers and assesses the layout's efficacy in terms of capacity and comfort; 3) Space Flexibility: Determine whether the terminal space can be adapted or reconfigured to meet a variety of needs or circumstances; and 4) Customer Satisfaction: Assesses travelers' satisfaction with their terminal experience, including comfort and accessibility (Permana, 2022).

Terminal relayout variables have been studied by previous researchers, including: (Dirayat et al., 2020), (Permana, 2022), (Pratama et al., 2015), (Sivanandi, 2022).

#### **Tenant Promotion**

Tenant promotion in the airport context refers to marketing techniques and promotional activities that aim to promote the visibility and appeal of commercial tenants at airports, such as retail outlets, restaurants, and other services. This could involve advertising campaigns, special events, discounts, or loyalty programs. This offer aims to improve sales and profitability for tenants while also increasing airport consumer experience and satisfaction. Effective promotional methods can help airports enhance non-aeronautical earnings by encouraging more visitors and passengers to use the airport's services and amenities (Fikri, 2022).

The indicators contained in tenant promotions are as follows: 1) Tenant Visit Rate: Determines the number of visitors or passengers who use tenant services, showing the success of the marketing; 2) Tenant Sales Increase: Quantifies the increase in revenue earned by renters as a result of promotional initiatives; 3) Promotional Engagement: Assesses how actively tenants participate in airport promotional initiatives, as well as the impact on visitor and sales growth; and 4) Impact of Promotions on Brand Awareness: Evaluating how promotions help to raise tenant brand awareness among airport visitors (Ramadhan et al., 2022).

Tenant promotion variables have been studied by previous researchers, including: (Fikri, 2022), (Fauziah et al., 2023), (Ramadhan et al., 2022), (Suryawan et al., 2024).

### **Previous Research**

Based on the findings above and previous research, the research discussion is formulated as follows:

**Table 1. Relevant Previous Research Results** 

No	Author (Year)	Research Results	Simmilarities with this article	Differences with this article	Basic Hypothesis
1.	(Lucas, 2022)	Public transport operator access fees, utility consumption costs and airport security influence non-aeronautical improvements	The influence of the security system on non- aeronautical improvements	The influence of public transport operator access costs and utility consumption on non-aeronautical improvements	H1
2.	(Mendes et al., 2023)	Airport terminal relaying and industry 4.0 have an impact on sustainable operations and increasing non-aeronautical revenue	The effect of airport terminal relayout on increasing non-aeronautical revenue	The influence of industry 4.0 on sustainable operations	Н2
3.	(Utami & Nurjanah, 2019)	Tenant promotions and marketing public relations strategies have an effect on increasing non-aeronautical income and business partner loyalty	The effect of tenant promotions on increasing non-aeronautical income	The influence of marketing public relations strategies on business partner loyalty	Н3

Based on the findings above and previous research, the research discussion is formulated as follows:

# The Influence of the Airport Security System on Increasing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport

Airport security systems, which include security incidents, reaction times, security technology investment, and security personnel training and certification, are critical to supporting and generating non-aeronautical revenue. The impression and reality of airport

security have a significant impact on non-aeronautical revenues, which include revenue diversification, revenue per passenger, commercial space occupancy, and tenant satisfaction. Tjilik Riwut Airport's minimal security incidents help to foster positive attitudes among passengers and tourists, which is critical for attracting and retaining traffic to non-aeronautical facilities such as retail shops, restaurants, and other commercial sectors. Good security ensures that visitors feel safe spending time and money at the airport, resulting in greater revenue from non-aeronautical sources.

An airport's capacity to respond promptly and efficiently to security events reduces disruption to operations and ensures a steady flow of passengers. This is critical for maintaining commercial activities at the airport operating efficiently, maximizing commercial space use, and improving the airport shopping and dining experience, all of which add to non-aeronautical revenue. Investments in advanced security technologies such as surveillance systems, biometric scanning, and threat detection tools help airports monitor and manage security more effectively. This improved technology not only increases security measures, but it also enhances the passenger experience, giving them confidence to use the airport's non-aeronautical services. This, in turn, may enhance revenue per passenger.

Well-trained and certified security personnel reflect the airport's ability to maintain security and safety. Professional security personnel not only successfully manage security threats, but also improve the quality of customer care. This promotes a safe and attractive airport environment, boosts visitor happiness, and stimulates the use of non-aeronautical facilities, all of which boost non-aeronautical income. Tjilik Riwut Airport's increase in non-aeronautical revenue is closely tied to the performance of its security system. Safe airports attract more passenger and visitor traffic, which directly impacts the utilization of non-aeronautical amenities. This includes shopping at retail outlets, using food and beverage services, and parking. Strong and dependable security also attracts new tenants and helps keep existing ones, thereby diversifying revenue streams and improving the airport's overall non-aeronautical earnings.

The airport security system has an effect on increasing non-aeronautical income, this is in line with previous research conducted by: (Astuty et al., 2023), (Satish et al., 2023), (Novita et al., 2020).

# Effect of Terminal Relayout on Increasing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport.

The terminal relay at Tjilik Riwut Palangka Raya Airport might significantly boost non-aeronautical earnings. Passenger flow efficiency, passenger capacity, space flexibility, and customer pleasure are all important considerations when developing terminals to satisfy operational objectives while also maximizing non-aeronautical revenue potential. Passenger flow efficiency is a major consideration in terminal relayout. Airports may improve the customer experience by making it easier for passengers to move from one location to another in a smooth and intuitive manner, encouraging them to spend more time in commercial areas. Terminal designs that improve access to retail outlets, restaurants, and other services can boost airport consumption and directly contribute to higher non-aeronautical income.

Terminal redesign to improve passenger capacity might have a direct impact on non-aeronautical income. With expanded capacity, airports can handle more passengers, perhaps increasing retail sales and other services. Furthermore, additional capacity allows for the introduction of events and promotions within the airport that attract passengers and visitors, giving tenants more opportunity to improve their sales. The versatility of space in terminal relayouts enables airports to modify commercial and service sections to shifting needs and market trends. Reconfigurable space makes it simple to add new retail concepts, pop-up stores, and promotional zones that can attract passengers while increasing non-aeronautical revenue.

This adaptability is also necessary to respond to changing passenger traffic patterns and enhance space utilization during peak and off-peak operations periods.

Customer satisfaction with terminal relayout is directly related to increasing non-aeronautical revenue. Terminals designed with passenger comfort and wants in mind can boost consumer satisfaction, which leads to increased spending at the airport. A comfortable terminal with simple access to amenities and services, as well as suitable waiting rooms, can improve the airport's retail and dining experience, encouraging more people to use commercial services. Strategic and passenger-focused terminal relayouts at Tjilik Riwut Palangka Raya Airport can be a significant driver of non-aeronautical revenue growth. Airports may foster economic growth by focusing on passenger flow efficiency, capacity, space flexibility, and customer happiness, in addition to supporting effective flight operations.

Terminal relayout has an effect on increasing non-aeronautical revenue, this is in line with previous research conducted by: (Dirayat et al., 2020), (Permana, 2022), (Pratama et al., 2015).

# The Effect of Tenant Promotion on Increasing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport

Tenant promotion at Tjilik Riwut Palangka Raya Airport contributes significantly to enhanced non-aeronautical revenue. Tenant visit rates, increased tenant sales, promotional engagement, and the impact of promotions on brand awareness all have a significant impact on non-aeronautical revenue by diversifying revenue sources, revenue per passenger, commercial space utilization, and tenant satisfaction. The number of visits to tenants such as retail establishments, restaurants, and other airport services is a significant factor in tenant promotion. High visits imply that promotions are efficient in attracting visitors, which not only improves direct revenue from sales but also contributes to the diversification of airport revenue streams. Higher traffic generates active market dynamics within the airport, increasing its appeal as a commercial and social hub.

Increased tenant sales as a consequence of successful campaigns immediately contribute to the airport's non-aeronautical revenue. When tenants have improved sales, the airport benefits from higher rents, a percentage of sales, or a mix of the two. This rise also encourages tenants to grow their operations at the airport, make better use of commercial space, and spend in improving their services and goods. Tenants' active participation in airport promotions and marketing activities can boost their exposure and accessibility to passengers and tourists. This participation not only boosts revenue and traffic, but it also helps to create a seamless and engaging visitor experience. Tenants can use the airport platform to increase their identity and market position, which helps non-aeronautical revenue by improving customer experience and satisfaction.

Successful campaigns raise tenant brand awareness among passengers and airport visitors, which is critical for increasing loyalty and driving repeat purchases. High brand awareness improves the airport's image as a shopping destination with high-quality services, drawing more passengers and tourists. This reinforces the airport's status as a commercial center while also increasing commercial space use, which directly supports non-aeronautical earnings. An effective and comprehensive tenant promotion strategy at Tjilik Riwut Palangka Raya Airport can have a significant impact on non-aviation revenues. Airports can create a vibrant and profitable environment for all stakeholders by increasing tenant visits and sales, actively participating in promotions, and raising brand recognition. This ultimately contributes to attaining the goals of diversifying revenue sources, improving revenue per passenger, maximizing commercial space occupancy, and boosting tenant and customer satisfaction.

Tenant promotions have an effect on increasing non-aeronautical income, this is in line with previous research conducted by: (Fikri, 2022), (Fauziah et al., 2023), (Ramadhan et al., 2022).

### **Conceptual Framework**

A conceptual framework has been established based on research findings, previous investigations, and the above-mentioned discourse:

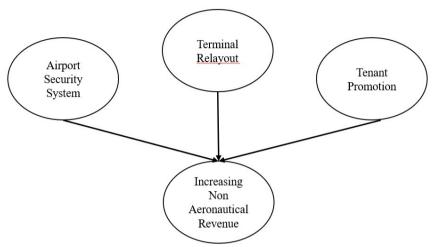


Figure 1. Conceptual Framework

Based on Figure 1 above, the airport security system, terminal relayout and tenant promotions have an effect on increasing non-aeronautical revenue. However, apart from the variables of the airport security system, terminal relayout and tenant promotions which influence the increase in non-aeronautical revenue, there are other variables which influence it, including:

- 1. Service Quality: (Widagdo, 2019), (Sihombing et al., 2022), (Susanto & Jumawan, 2022), (Sihombing et al., 2022), (Simarmata et al., 2022).
- 2. Passenger Satisfaction: (Simarmata & Keke, 2016), (Ulfah et al., 2020), (Novianty et al., 2021), (Simarmata et al., 2017).
- 3. Tenant Image: (Saputra & Sumantyo, 2022), (Meutia et al., 2021), (Syahwi & Pantawis, 2021), (Tjahjadi & Limakrisna, 2022).

#### CONCLUSION

Based on the problem formulation, results and discussion above, the conclusions of this research are:

- 1. The Airport Security System has an effect on increasing Non-Aeronautical Revenue at Tjilik Riwut Palangka Raya Airport.
- 2. Terminal Relayout has an effect on increasing non-aeronautical revenue at Tjilik Riwut Palangka Raya Airport.
- 3. Tenant promotions have an effect on increasing non-aeronautical income at Tjilik Riwut Palangka Raya Airport.

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