

Segmentation of Passenger Preferences for Spending Rate and Product Positioning at Terminal 3 Soekarno Hatta International Airport

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Abstract: The purpose of this study is to understand the segmentation, shopping tendencies, and commercial product preferences of passengers at Terminal 3 Soekarno Hatta Airport. The research design uses a quantitative method as an approach. Data collection was conducted through questionnaires randomly distributed to 385 respondents as a sample, using the Lemeshow formula with a 95% confidence level, a 5% margin of error, and a 50% maximum estimation. The results of the study show that passenger segmentation at Terminal 3 Soekarno Hatta Airport is dominated by solo travelers, families, and business groups. The majority of passengers (62%) tend to shop within the price range of IDR 50,000 – 250,000, with the main product preference being food and beverages such as coffee shops, bakeries, and cafes available in the waiting areas and departure zones.

Keywords: Customer Spending, Passenger Characteristics, Segmentation, Preferences

INTRODUCTION

Air transport was traditionally highly regulated, fragmented, and protected (Kazda et al., 2013). Airports represent a significant piece of infrastructure within the transportation sector, playing a vital role in the economies of nations by accommodating millions of travelers each year. In order to capitalize on this immense and profitable opportunity, airports globally have been striving to establish themselves as preferred transit hubs for both travelers and airlines (Kosiba et al., 2020). In recent years there has been a shift in focus from operational excellence to providing an impressive customer experience (Harrison, 2015). Implementing customer experience strategies is essential, as enhancing customer satisfaction is the most effective approach to boosting non-aeronautical revenues. In fact, a 1% rise in the overall passenger satisfaction average, according to the Airport Service Quality (ASQ) Survey, typically leads to an average increase of 1.5% in non-aeronautical revenue (ACI, 2024).

The changes in the industry and in the expectations of the traveller have begun to alter the way that the industry approaches the understanding, and thus the segmentation, of their

passengers (Harrison, 2015). Airports have transformed into vibrant locations for shopping, participating in leisure activities, and unwinding during a layover. As tourism services initiate and conclude at an airport, a commercially focused and competitive airport is essential for the growth of tourism and enhancing destination competitiveness (Wattanacharoensil, et al, 2017). The coveted title of ‘Most Enjoyable Airport’ for the Middle East was awarded to Queen Alia International Airport in Jordan, whereas Beijing Daxing, Kuala Lumpur, Pattimura, Sultan Hasanuddin, and Yogyakarta International Airport in Indonesia all tied in the Asia-Pacific region (ACI, 2023).

By optimizing outcomes and utilizing resources to their fullest potential, initiatives aimed at boosting revenue can ultimately secure the expenses related to airport facility operations. At the same time, given the rise in global aviation trends within the Asia Pacific Region, a well-managed infrastructure foundation that adheres to international standards is essential to satisfy the requirements of airport entities (Widyawan et al., 2024). In order to meet the demands of air transport users, whether they are passengers or cargo, airports must enhance their marketing strategies. To promote competitive differentiation, Soekarno-Hatta International Airport launched Terminal 3 Ultimate in 2016, positioning itself as a transportation hub within the Asia Pacific region. Soekarno-Hatta Airport is being developed to become a transportation hub that emphasizes growth in non-aeronautical areas. (Rafi et al., 2022).

Tourism and hospitality marketers often do not dedicate sufficient time to identifying, segmenting, and comprehending their target markets. They frequently look for shortcuts whenever possible. The idea behind market segmentation is rooted in the understanding that consumers have diverse preferences. Nevertheless, this idea is often overlooked in tourism marketing, with numerous marketers opting for a wait-and-see strategy and providing a variety of options without concentrating on the requirements of a specific market segment. (R. George, 2021).

The following are the movements of aircraft and passengers at Soekarno Hatta Airport in the last 5 years (until November 2024) and the Commercial Revenue Stream.

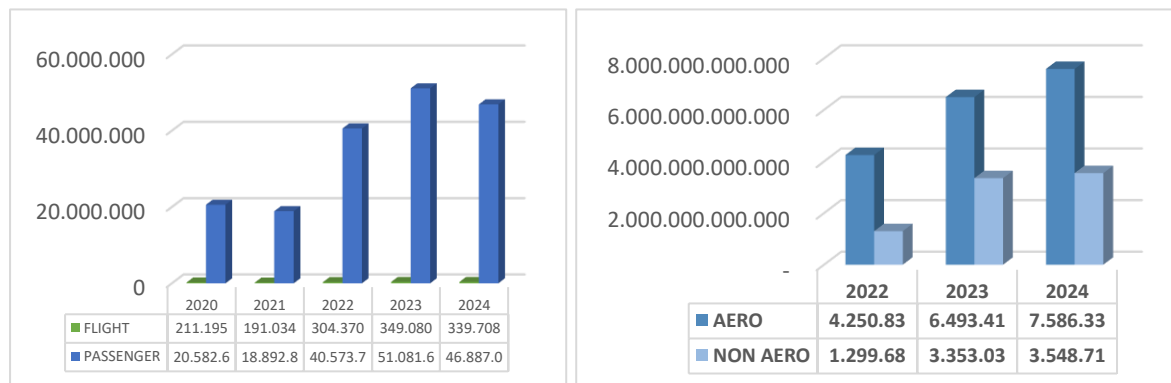


Figure 1. Flight & Passengers Movement and Commercial Revenue Stream in Terminal 3 Soekarno-Hatta International Airport

Following the chart, it can be seen that passenger movement continues to grow every year, this is an opportunity for the management of Terminal 3 Soekarno Hatta International Airport to be able to increase revenue stream from the non-aeronautical side, especially the commercialization business.

The company needs to determine its target audience. It accomplishes this by segmenting the market into different customer groups (market segmentation) and choosing the specific segments it intends to pursue through targeted marketing (Kotler & Armstrong, 2018). As airports face increasing competition, it is essential to survey passengers about airport services

to provide managers with insights that can help them meet and surpass customer expectations, ultimately boosting revenue (Bae & Chi, 2022). Soekarno Hatta International Airport Terminal 3 has various passenger segments so research needs to be carried out to find out what the distribution of passenger segmentation is so that it can provide input for management in carrying out tenant mixing and knowing the position of each product. Three research questions drive this study: (1) What is the segmentation of passengers at Terminal 3 Soekarno Hatta Airport? (2) What do passengers expect in terms of spending money at Terminal 3 Soekarno Hatta Airport? (3) What product position brand is most popular with passengers at Terminal 3 Soekarno Hatta Airport?

Brand availability plays a role in measuring the level of customer satisfaction at Departure Terminal 3 Soekarno Hatta (Simarmata et al., 2024). Brand awareness informs consumers about the category of services or products in which the product competes. A crucial factor in the company's achievement of enhancing brand recognition is how well consumers understand that the brand is designed to meet their needs (Samosir et al., 2023).

METHOD

This research will use a quantitative approach as the research method. The research decision to use the quantitative method is based on the need to provide numerical results and accurate data regarding passenger segmentation and their spending preferences in the departure area of Soekarno-Hatta Airport's Terminal 3, as well as the commercialization position of the customer's side. The research begins with data collection through a questionnaire by Google Forms to be distributed to domestic and international passengers who waiting for flight schedules in the Boarding Lounge and Arrival Zone. Furthermore, data tabulation and processing will be conducted to analyze shopping segmentation and product positioning on the customer's side.

The sample was randomly selected using the Lemeshow formula with a 95% confidence level, a 5% margin of error, and a maximum estimate of 50%, resulting in a sample size of 385 respondents. Data tabulation, analysis, and descriptive interpretation were then conducted.

RESULTS AND DISCUSSION

Results

Passenger Segmentation

According to Mark & Camilleri (2018), The traditional variables that may be used for market segmentation can be grouped into five main categories: (1) Demographic; (2) Geographic (3) Psychographic; (4) Behavioural, and (5) Product-Related Factors. Segmentation is an important analytical tool that forms the basis of the internal analysis stage of the marketing planning process (R. George, 2021). Passenger segmentation refers to the process by which companies classify a market into distinct groups of consumers who have comparable needs, traits, or behavioral patterns and may need different products or marketing strategies (Kotler et al., 2017). Based on the study by Harrison et al., (2015) a new categorization of passengers emerged, reflecting their fundamental relationship with time at the airport: Airport Enthusiast (actively engaged, not concerned about time); Time Filler (disengaged, not concerned about time); Efficiency Lover (disengaged, focused on time); and Efficient Enthusiast (actively engaged, focused on time).

One efficient approach to segmenting customers is by developing user 'personas' that embody the diverse objectives and traits of key customer groups, offering insight into the typical preferences of each customer segment. (Calista et al., 2022). According to ACI (2016) The six passenger personas—namely the Workman, the Friendly Vacationer, the Value Seeker, the Sunlounge Tourist, the Timekeeper, and the Airport Enthusiast—serve as detailed

representations of important passenger behavior segments. Leisure travelers usually include Friendly Vacationers, Sunbathers, Airport Fans, and Budget-Conscious Travelers, while business travelers are commonly classified as Time Managers and Professionals. ACI (2018) outlines five types of passenger profiles, including the service-oriented cautious traveler, the budget-conscious adventurer, the meticulously-organized dreamer, the luxury-focused comfort traveler, and the practical business traveler. By developing these imaginary personas, airport operators can gain a deeper understanding of passengers by picturing their requirements as they navigate through the airport. This classification enables airports to intentionally design varied customer experiences that cater to the distinct needs of different types of travelers. (Calista et al., 2022).

Passenger Perception

Perception of the passengers is a complex concept and its evaluation requires appropriate instruments, a clear understanding of the relevant dimensions of the concept (I. George & George, 2022). According to ACI (2018) Recognized three tiers of passenger perception: required, expected, and valued. These tiers can serve as frameworks for establishing objectives for passenger services. The required level encompasses the essential "must-do" elements mandated by authorities, Airport Managing Bodies, or passengers. Secondly, the anticipated level of passenger perception indicates that an airport must provide a range of services to be regarded as a quality airport. Thirdly, the valued level includes services that unexpectedly delight passengers. These three levels can vary from one airport to another, and even between terminals within the same airport, based on the airport's operational strategy and the current needs of the passengers.

As airports become more competitive, it is imperative to investigate travellers' perceptions of airport service quality so airport managers can understand, meet, and exceed their customers' expectations (Bae & Chi, 2022). Since the major goal of the service supply was to satisfy customers, a passenger survey was considered the most effective technique to measure their contentment and reflect service quality (Yang et al., 2015).

Passenger Spending

Marketers identify consumers' unfulfilled needs or those only somewhat addressed by existing products and develop and advertise better alternatives. Consumer behavior sheds light on how individuals choose to allocate their money, time, and effort on the goods presented by marketers, and explains the reasons behind their product and brand selections, as well as the timing and locations of their purchases (Schiffman & Wisenblit, 2019). Our lifestyles are influenced by how we feel about and prioritize important resources. Money carries intricate psychological connotations; we associate it with achievement or defeat, social approval, stability, affection, or independence. The physical and social surroundings of a consumer influence their shopping experience and the way they choose a specific product. Significant indicators consist of their immediate setting and the number and nature of other shoppers present at the same time.

Numerous elements influence a buying decision. These factors encompass the consumer's prior emotional state (such as their mood, time constraints, or attitude toward shopping). Time plays a crucial role in determining the level of effort and search a consumer will engage in when making a choice. The atmosphere of a store affects our moods based on the levels of enjoyment and excitement it generates. The shopping experience plays a crucial role in the purchasing decision. Often, retailing resembles a performance: Shoppers' assessments of stores and products can be influenced by the kind of "show" they observe. The performers (i.e., sales staff), the backdrop (i.e., the store ambiance), and the items (i.e., store presentations) affect this assessment. Various elements, including perceived convenience,

elegance, and the professionalism of sales personnel, contribute to the image of a store, which can be likened to a brand's personality. With the rise of competition from non-store alternatives, it has become crucial for retailers to foster an enjoyable shopping experience. The popularity of online shopping is on the rise, and this modern method of purchasing products has both advantages (e.g., convenience) and disadvantages (e.g., security) (Solomon & Antonio, 2024).

Positioning Product

Product positioning is a strategic process used by companies to establish a distinct image, perception, or identity for a product in the minds of consumers relative to competitors. This positioning enables consumers to understand how a product meets their needs and why it's a better choice than alternatives. Product positioning aims to secure a unique, advantageous spot in the market that aligns with the brand's value proposition and appeals directly to the targeted consumer segment.

Solomon & Antonio (2024) suggest that effective positioning is crucial because it not only differentiates a product but also prompts consumers to categorize it within a market or product category. This classification helps customers understand the product's relevance to their needs and why it is preferable to other options. Product positioning is indeed a core marketing strategy aimed at establishing a distinctive place in consumers' minds for a product compared to competitors, effectively shaping consumer perceptions in line with the brand's unique benefits. By clarifying the product's identity and emphasizing why it better satisfies consumers' needs, companies can gain a competitive edge and foster brand loyalty.

The core theories of product positioning can be grouped into five main categories, such as Differentiation, Perceptual Mapping, Value Proposition, Brand Image, and Attribute-Based Positioning. First, Differentiation is an aspect that emphasizes the unique qualities that set the product apart from competitors, often highlighting unique features, technology, or superior benefits that meet specific customer needs. Differentiation allows the product to be perceived as one-of-a-kind within its market space. Then, Perceptual Mapping is a visual tool used to position the product relative to competitors in terms of specific attributes (e.g., price, quality, or style). By using these maps, marketers can identify market gaps and reposition products if needed, based on consumers' preferences and perceptions.

Value Proposition is a concept that focuses on the unique value a product provides to its target audience. A well-defined value proposition clarifies how a product can solve a problem, enhance an experience, or deliver a benefit that competitors do not offer, making it central to any positioning strategy. Brand Image is the overall perception of the brand, which can be shaped by advertising, brand story, or cultural associations, and significantly influences product positioning. The brand image helps consumers quickly identify the product's values, personality, and ethos. Attribute-based positioning is an approach that involves highlighting specific product attributes that appeal directly to consumers, such as quality, price, style, or functionality. By focusing on these attributes, companies can position the product to attract consumers whose needs align with those features. The success of a positioning strategy hinges on the marketer's ability to convince the consumer to consider its product within a given category (Solomon & Antonio, 2024).

Based on the survey of 270 departure passengers and 133 arrival passengers, the following results were obtained:

Passengers Demography

Table 1. Passengers Demography of Terminal 3 Soekarno Hatta Airport

Demography	Frequency (%)	Demography	Frequency (%)
Age:		Gender:	
< 21	12%	Male	50%

22 – 30	41%	Female	50%
31 – 40	24%		
> 40	23%		
Spending Time			
< 1 hour	27%	Travel Destinations	Business 32%
1-2 hour	54%	Education	8%
> 2-3 hour	19%	Family/Friends	15%
		Leisure	28%
		Other	17%

Based on Table 1 above, it can be seen that the number of male and female passengers was balanced, dominated by Millennials and Gen Z with the primary travel purposes for business and leisure.

Passengers Segmentation

Referring to ACI (2018), there are five customer segmentation groups based on the demographics of passengers at Soekarno-Hatta International Airport, as follows:

Table 2. Passengers Segmentation of Terminal 3 Soekarno Hatta Airport

Segmentations	Demography	Frequency (%)
The service-demanding cautious traveller	Male and Female solo travelers over the age of 31, who frequently travel to visit family or for leisure purposes	9%
The cost-conscious adventurer	Male and female solo travelers under the age of 31, who frequently travel to visit family or for leisure purposes	29%
The well-planned dreamer	Families who frequently travel for vacations to visit relatives	29%
The comfort-seeking luxury traveler	Male and female solo travelers who frequently travel for business purposes	5%
The efficient business traveler	Indonesian corporate groups who frequently travel for business purposes	27%

Based on Table 2 above, it can be seen that passenger segmentation at Terminal 3 of Soekarno-Hatta Airport is dominated by three passenger segments: solo travelers under the age of 31, passengers traveling with family, and business group passengers.

Preferences for Spending Money

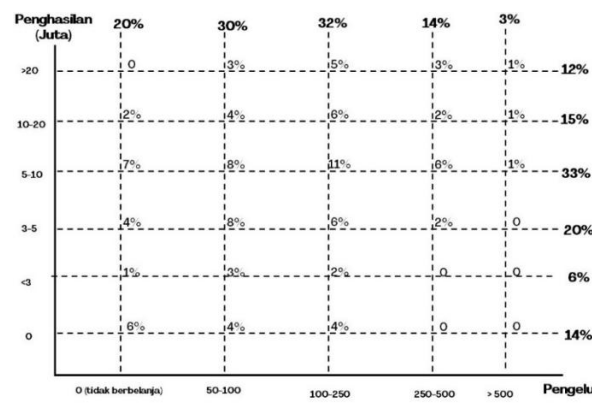


Figure 2. Passengers Preferences for Spending Money at Terminal 3 Soekarno-Hatta Airport

The income levels of Terminal 3 passengers are quite diverse, with the majority (68%) falling within the income range of IDR 3 million to 20 million. Most passengers shop within the price range of IDR 50,000 to 250,000, with 30% spending between IDR 50,000 and 100,000, and 32% spending between IDR 100,000 and 250,000. Additionally, passenger spending preferences at Terminal 3 were also targeting the price range of IDR 250,000 to 500,000. It can be assumed that the spending rate of Terminal 3 passengers was quite varied, but still dominated by products within the price range of IDR 50,000 to 250,000.

Product Positioning

The age group of passengers was dominated by Millennials and Gen Z (aged 21–40 years). Based on the top 5 responses from respondents, this presents an opportunity to provide F&B tenants such as coffee shops, bakeries, and cafes in the Boarding Lounge or Departure Hall of the terminal. The spending rate of passengers was dominated by consumable needs (within the price range of IDR 50,000–250,000), so it is recommended to provide tenants that sell consumable goods. It can serve as valuable input for the placement of F&B and retail tenants to enhance commercial revenue.

CONCLUSION

The gender distribution of passengers at Soekarno-Hatta Airport Terminal 3 is balanced, which means that the provision of gender-related facilities and services should also be balanced. The majority of travel purposes are dominated by groups traveling for leisure, family visits, and business, with an age range below 40 years. This provides input for the management of Terminal 3 at Soekarno-Hatta Airport to adjust the provision of facilities, services, and the fulfillment of commercialization needs according to the passenger segmentation and their spending rate on consumable goods.

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