

Article

Indonesian Logistics Preferences during COVID-19 Pandemic

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Abstract: This study aims to identify the critical factors of shipping success and courier services in Indonesia. The study uses a survey questionnaire in Indonesia on the consumer preferences of logistics service consumers, using the location of Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek) as the locational preferences. The critical factors consist of ease of use of delivery services; estimated shipments; package delivery location; delivery operational time; availability of packaging services; pricing methods; package guarantee; payment method for shipping costs; ease of use serving tracking; tracking maps; delivery location; delivery operational time; availability of delivery information packages; delivery failed compensation; service scape, corporate image, user image, product image, and price. A total of 150 respondents participated in this study. In conclusion, most consumers use the logistics service for small package delivery. The consumer also did not believe the service provider needed to be available 24 hours per day, 7 days per week. Nevertheless, they prefer it if the provider provides the shipping day estimation. The results of the rate preference survey, the consumer study reveals that for the safety of the shipping process, providers must charge an additional fee for standard packaging. Also, the consumers are willing to pay more for the warranty of the package protection during the shipping process. Thus, the providers service includes extra packaging based on the package type. Moreover, they need access to track the package in real-time using the provider's application or website. Hence, the courier and all the staff must update the package position during the shipping process.

Keywords: logistics preferences; COVID-19 pandemic; shipping cost; Indonesia.



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1. Introduction

Logistics and supply chain management have become the business's essential aspects during the COVID-19 pandemic. Due to the rapid and unprecedented demand for the service, vulnerabilities in the

global logistics networks have been exposed. They will forever change how merchants produce, ship, and deliver products. Consumers understand these complications but still want goods delivered fast, free, and, most importantly, on time (Rahadi et al., 2020). Changes also happened in the world's supply chain and logistics management marketing strategies, where the connection between dry ports and seaports has become increasingly efficient (Jeevan et al., 2022).

Businesses that do not meet customer expectations will be left behind as brands work on digitizing their supply chains, improving transparency, and investing in sustainable business practices. Buyers and sellers who utilize online transactions to transport their items have two options for delivery: meeting in person or employing a delivery service. Every individual needs quick and secure delivery of goods to ensure that the things delivered reach the correct time and location (Dalal & Sharma, 2019). Due to the market growth, plenty of delivery service firms are already continuing to grow and compete to seize the market to suit product delivery needs (Wasiyanti & Putri, 2020). The COVID-19 epidemic, which began in March 2020 and affected Indonesia, boosted growth in the postal and courier industries by 33.62 percent. With the rising development of the circular economy and digital business trends in the Indonesian business ecosystem, the express delivery service industry is becoming the backbone for the growth of other industries. The fact can be seen in Figure 1 below. Based on the survey conducted by Hanifah & Rahadi (2020) in Indonesia, the use of courier services to deliver goods has increased during the COVID-19 coronavirus pandemic.

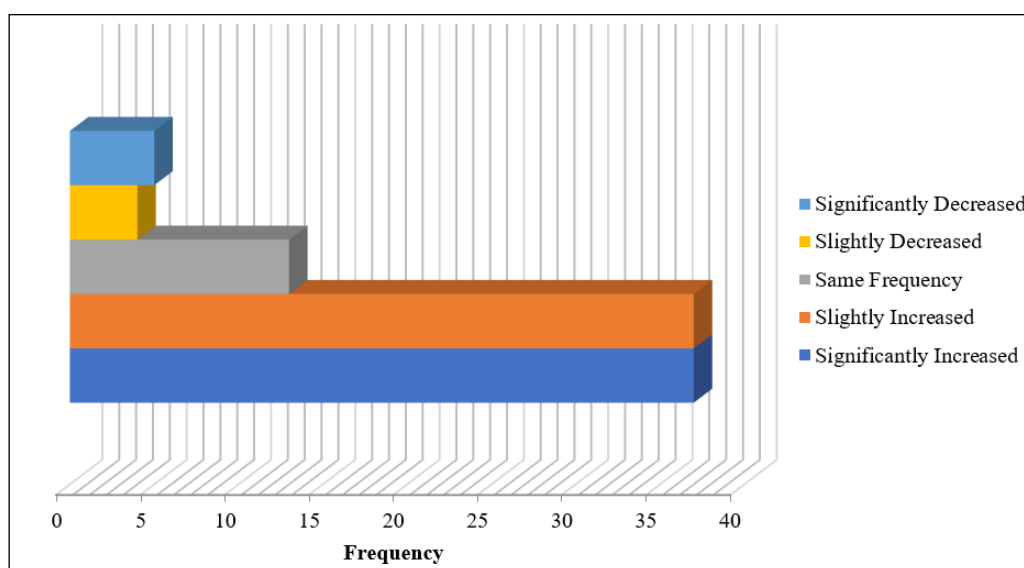


Figure 1. Frequency of Using Courier Services during the COVID-19 Pandemic

Source: Hanifah & Rahadi (2020).

Indonesia climbed the World Bank's Logistics Performance Index (LPI) internationally and in Southeast Asia, ranking 46th out of 160 nations globally and fifth out of eight ASEAN countries (Beysenbaev & Dus, 2020). Warehousing, postal, and courier services developed faster than other logistics sub-sectors, supported by increased e-commerce-driven last-mile delivery. The Indonesian Logistics Association (ALA) estimated that the volume of goods exports rose by up to 40% during the COVID-19 pandemic. The pharmaceutical industry, medical equipment, and consumer goods increased. Because of a forecasted increase in online purchasing clients in 2020, the e-commerce sector surged throughout the pandemic.

Customers must add the expense of delivery charges when purchasing products online. These fees may be included in the list price (all-inclusive pricing) or imposed as a separate charge as a shipping and handling fee (Rita et al., 2019). The company would ideally charge different delivery fees to customers willing to pay for delivery when it comes to maximizing revenue (Saputra & Heriyanto, 2017). Because it is tough to determine each customer's best price, the store may consider selling groceries at a discount and compensating for this loss with hefty shipping fees (Lewis, 2006). Alternatively, it may provide low-cost (or even free) delivery while charging premium costs for food. The best technique is determined by whether or not a demand for groceries is positively connected with the willingness to pay for home delivery (Ahmad, 2018); (Gil et al., 2020).

Consumers who want a service, such as a courier service, may be satisfied with the service's quality. Consumers can place a monetary value on the level of service they expect and receive based on their level. Package delivery providers may give outstanding service by supplying services like delivery speed, delivery accuracy, and friendliness, leading to high consumer satisfaction (Bekiros et al., 2019). A tracking system, which all shipping service organizations currently utilize, can help with delivery speed and accuracy (Shehu et al., 2020). From all the information presented here, the success of courier and shipping services in Indonesia would depend on various influencing factors. Thus, the primary purpose of this study is to identify influencing factors critical to the success of shipping and courier services in Indonesia. The Jakarta Metropolitan Area has a high population density and a high demand for intra-city and inter-city shipping services. As the capital city of Indonesia and the centre of business and government, Jakarta has attracted urbanization throughout Indonesia, resulting in a high population density. According to the World Population Review, the population of Jakarta in 2020 is projected to reach 10,770,487, with an annual growth rate of 1.15 percent. This circumstance makes Jakarta an enormous market for shipping companies. The issue statement is presented first, followed by the materials and methods of analysis. The section concludes with analysis results and discussion.

2. Materials and Methods

A survey was conducted in Indonesia on the consumer preferences of logistics service consumers, using Jabodetabek as the emphasis. Based on the initial literature analysis, the authors have compiled fourteen influencing categories influencing logistics consumer preferences in Indonesia, which were taken from the previous study. The variables are demographic information; ease of use of delivery services; estimated shipments; package delivery location; delivery operational time; availability of packaging services; pricing methods; package guarantee; payment method for shipping costs; ease of use serving tracking; availability of information tracking; tracking maps; delivery location; delivery operational time; availability of delivery information packages; delivery failed compensation; servicescape, corporate image, user image, product image, and price. The survey was conducted through an online questionnaire delivered to respondents in Indonesia, with the analysis method through descriptive statistics.

3. Results

The survey was conducted with 150 respondents, and 56% of them were male. The rest are females, most of whom live in Tangerang/Tangerang Selatan, Bekasi, Depok, and Bogor, as seen in Figure 2 below. Also, the survey shows that most respondents use logistics services to ship goods 1-5 times in three months. The second significant respondent's answer is on 6-10 and more than 20 times per three months, which is more frequent. In addition, as shown in Figure 3 below, the respondents tend to choose the small package delivery service.

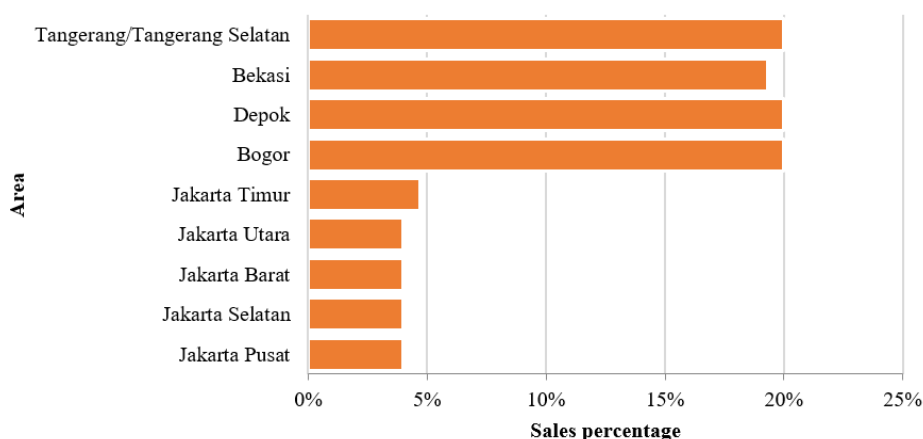


Figure 2. Respondents' Domicile

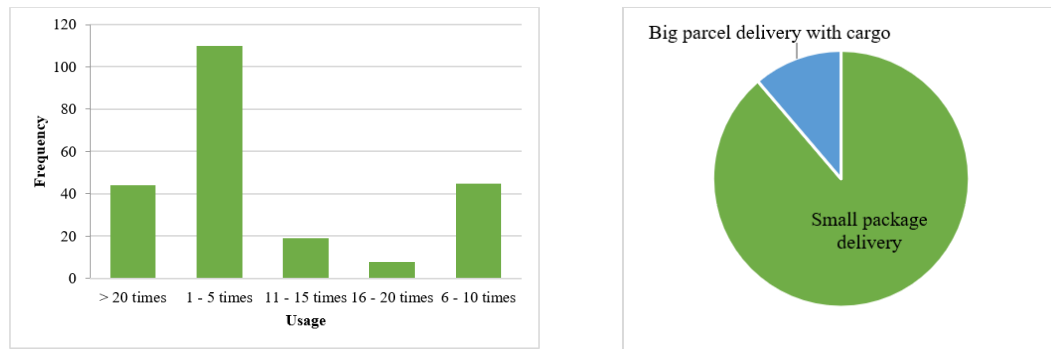


Figure 3. (a) Logistics Usage Frequency; (b) Types.

Using a Likert scale of 1-5, in the ease of use of delivery services, the answer in Figure 4 shows that most consumers directly deliver packages to the service provider's location. Respondents agreed that logistics service providers should provide estimated delivery time options in variations of delivery packages and access to contact service providers such as telephones, applications, or official pages.

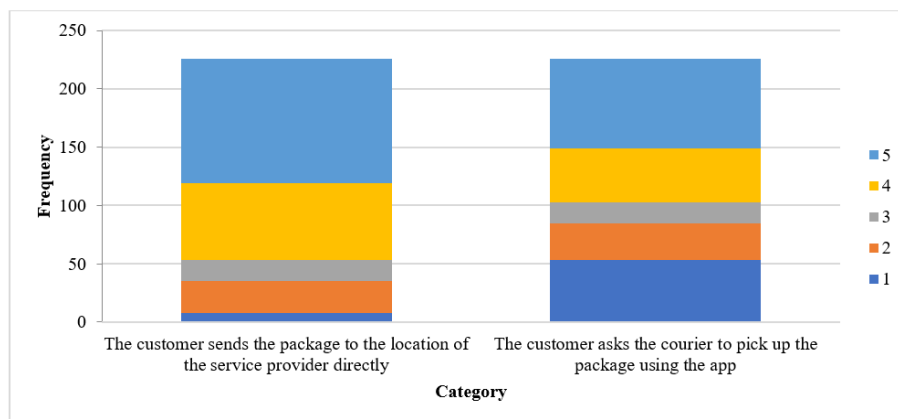


Figure 4. The ease-of-use delivery service

Respondents also stated that logistics service providers sometimes cooperate with other logistics providers in shipping goods. It is preferable if the providers provide several delivery times. For operational delivery time, respondents generally stated that logistics service providers are always present to accompany them, both on holidays. Respondents also expressed interest in service providers providing various options for estimated delivery times.

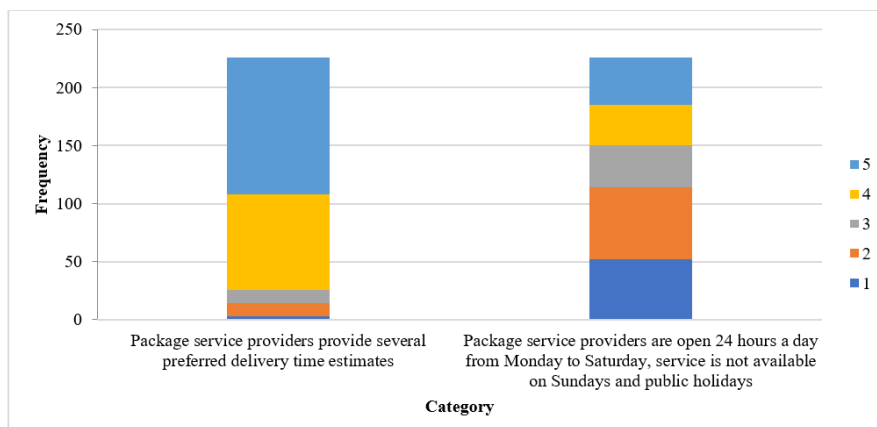


Figure 5. Delivery or Shipping Time

For the safety of the delivery process, the consumer already asked about the additional packaging from the provider since each kind of good shipped has its characteristic handling during shipping. Logistics service providers provide standard packaging in their service. When consumers ship their products with different packaging (such as glassware), they will be charged additional costs consumers is somewhat preferable to the consumer. It can be predicted that some of them could not reach the packaging itself. From the consumer's view, for setting tariffs, logistics service providers are more focused on determining prices in terms of weight (kg) compared to size (meters), as seen in Figure 7.

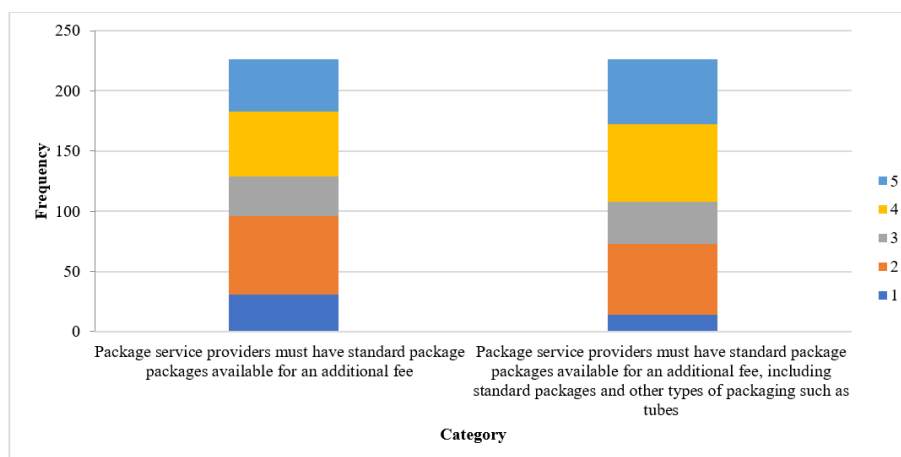


Figure 6. Availability of packaging service

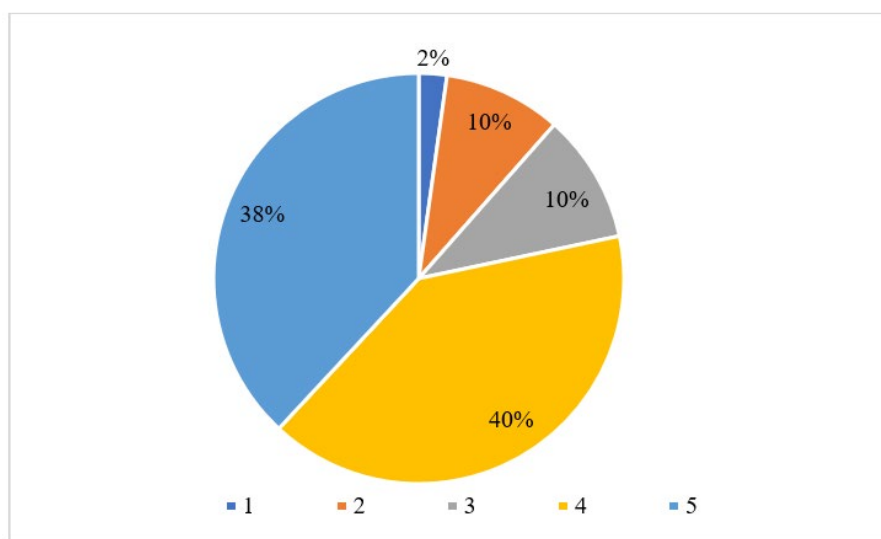


Figure 7. Rate of Preference

In terms of warranty, respondents agreed that the logistics service provider would provide a warranty for the products delivered at an additional cost. It is essential to hedge the risk of shipping the goods, such as weather delays, piracy, lost merchandise or goods, trucking accidents, or human error. In the event of damage to the package goods, respondents agreed that the logistics service provider provides compensation worth at least 50% of the price of the package delivered. Logistics service providers already accept payment methods beyond cash for shipping fee payment methods, even digital money. Renewable technologies are currently attempting to address any shortcomings that have been felt thus far through non-cash payment methods, sometimes known as electronic transactions. It is referred to as an electronic transaction since the payment instrument utilized is derived from electronic gadgets that have been modified in various ways (Hastomo & Aras, 2018).

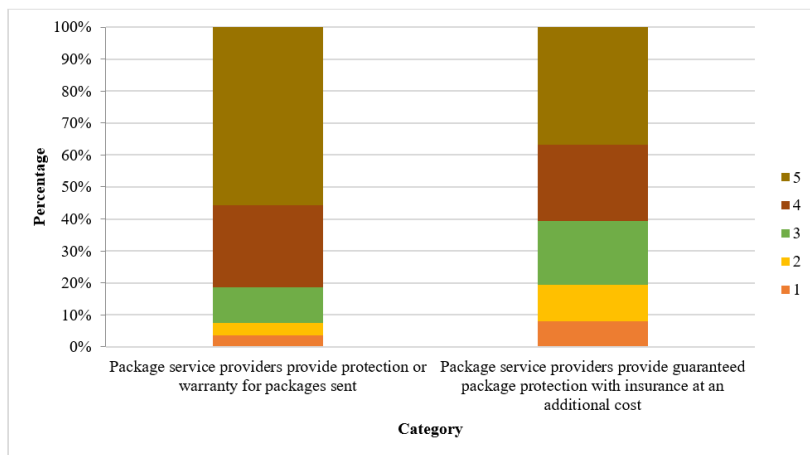


Figure 8. Warranty Preferences

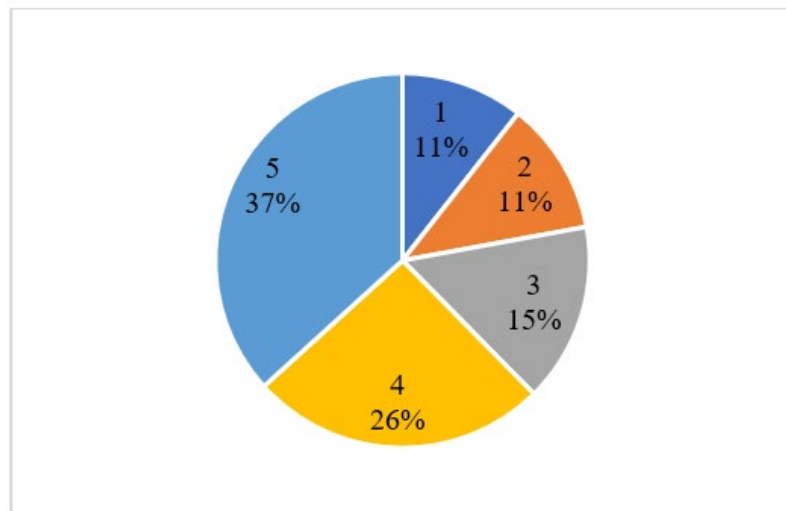


Figure 9. Payment Preferences

Consumers can track the package delivered by accessing the provider's official page and application. The availability of package tracking information and product shipment estimates are well-informed, as in the form of a map of the last location of the package.

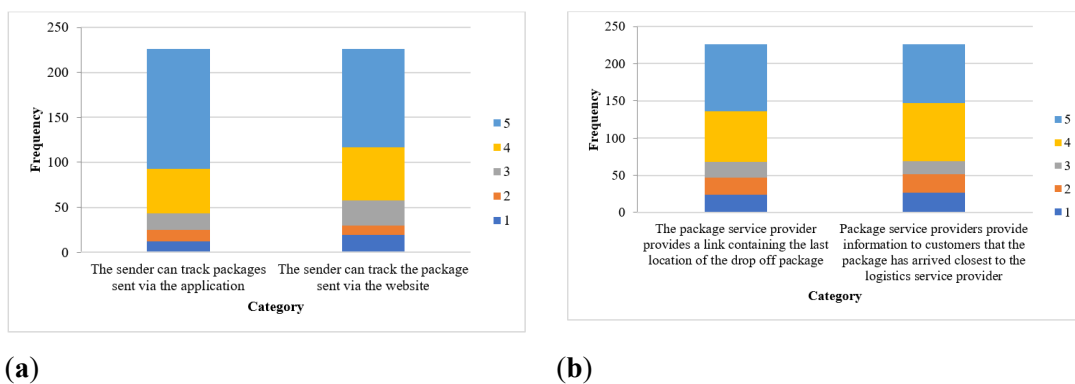


Figure 10. (a) Package Tracking; (b) Availability of shipping information packages

As shown in Figure 10, consumers prefer to track their packages through the application by the sender. Also, the receiver can track by inputting the shipping number on the application and website. The tracking information could include the precise position of the package by stating the provider's location or a visual interface such as a map. For the logistics service provider's location, consumers expect a servicescape in the form of air conditioning, adequate waiting room, sound equipment, clear instruction information, good service quality from agents, neat and polite clothes, with the ability to provide clear and polite answers. It is very natural for a consumer to expect a convenient service from the provider; thus, each provider must include these indicators in their operational standard.

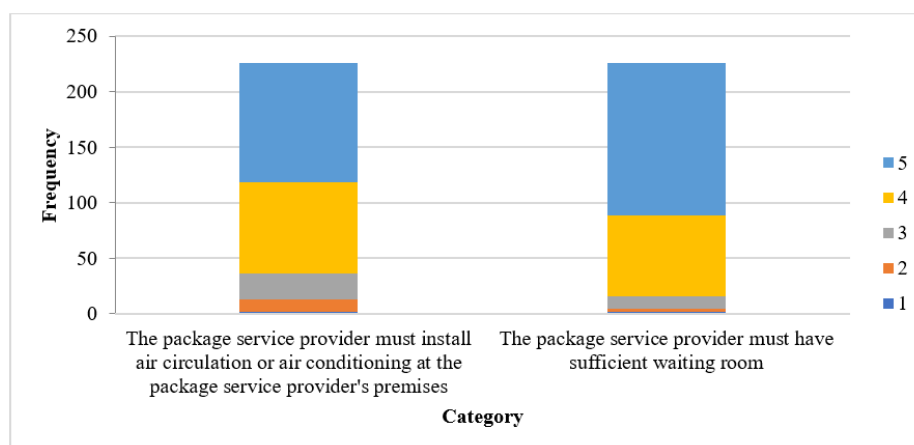
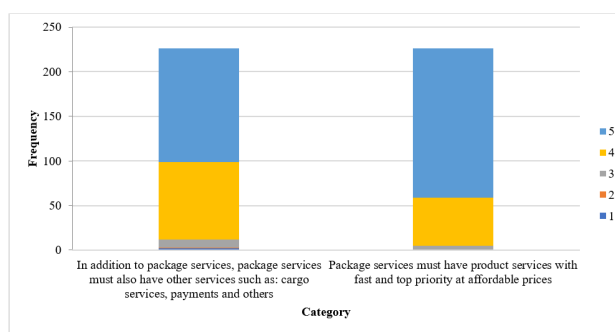
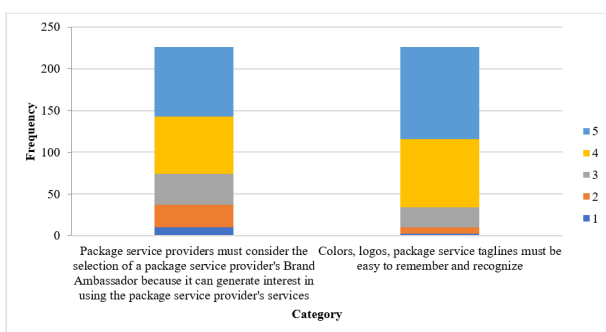


Figure 11. Servicescape Preference

Regarding branding, logistics service providers must use the right brand ambassador services to be popular in the community. There will also be a plus accompanied by colours, logos, and taglines of package services that are easy to remember and recognize. Services from logistics service providers must be enjoyed by all circles of all ages and have a range of products that suit online businesspeople. Regarding the product image, logistics service providers are expected to have a wide variety of services, with broader service integration, such as cargo services and product services with fast and top priorities at affordable prices.

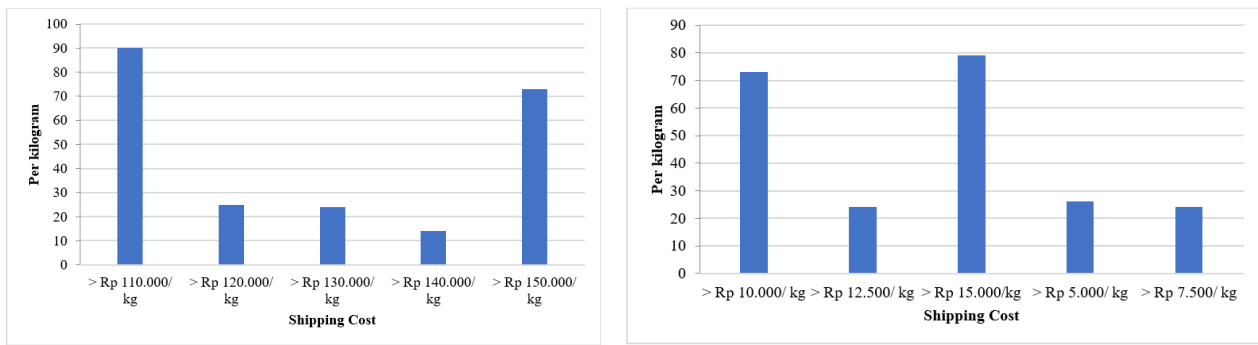


(a)

(b)

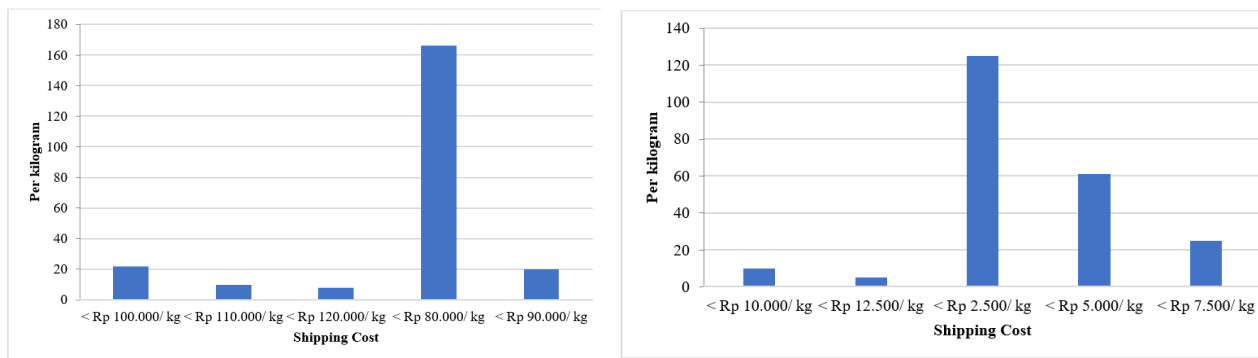
Figure 12. (a) Corporate image; (b) Provider's Image

Finally, when asked about the appropriate price range for logistics service providers and shipping costs per kilogram. The most expensive shipping costs assumed to be logical by respondents for long-distance delivery (in this case with a distance of Sabang to Merauke) is more than IDR 150,000 / kg, while for short-distance delivery (in this case with the distance Bandung - Cimahi) is above IDR 15,000 / kg.



(a) (b)
Figure 13. Expensive Price Preference (a) 5.245 KM; (b) 13 KM

While for the cheapest postage that is assumed to be logical by respondents for long-distance delivery (in this case with the distance from Sabang to Merauke) is less than IDR 80,000 / kg, while for short-distance delivery (in this case with the distance Bandung - Cimahi) is cheaper than IDR 2,500 kg.



(a) (b)
Figure 14. Cheap Price Preference (a) 5.245 KM; (b) 13 KM

4. Discussion

During the COVID-19 pandemic, supply chain management and logistics have evolved into crucial components of the company. Vulnerabilities in the world's logistics networks have been made public because of the service's sudden and extraordinary demand. They will always alter how manufacturers, shippers, and distributors of goods operate. Since Jakarta is Indonesia's capital and administrative and commercial hub, it has drawn urbanization from residents throughout Indonesia, resulting in a dense population there. The World Population Review estimates that in 2020 Jakarta will have a population of 10,770,487, an increase of 1.15% annually. This circumstance unquestionably makes Jakarta a significant market for transportation companies. The study shows that most consumers who respond to the questionnaire use the logistics service for small package delivery. They can directly send the package to the provider's location. The consumer also did not think having the provider operate 24 hours in 7 days was vital.

Nevertheless, they prefer it if the provider provides information on the shipping day estimation. For the shipping process safety, the consumer survey concluded that it is somewhat important that the providers have their packaging standard with an additional fee. It is aligned with the result from the rate preference, in which the consumer prefers to obtain the shipping cost based on the package weight. Additionally, consumers tend to pay more for the warranty of package protection during the shipping process. Thus, they need to be accessible to track the package in real-time by using the provider's application or website. For the payment method, many consumers prefer to use digital money to pay the shipping fee since there are many promos for using digital money nowadays. It is also crucial for the consumer if the providers maintain their service quality and image by providing the best service and proper location to ship the package.

Finally, the consumers think that more than IDR is for the price preference. 110.000/kg and IDR. 15.000/kg is too expensive for long and short distances. Therefore, this study found that service providers should consider the specifics of adopting a threshold-based free shipping structure and offer significant alternative referents, such as a price reduction or promotion, that divert attention from the referents used in assessing shipping cost structures. Additionally, Istiqomah & Marlana's (2020) found that free shipping promotions and online customer ratings are characteristics of e-commerce in Indonesia, and both contribute to facilitating and expediting purchasing decisions. Free shipping offers can assist consumers in obtaining lower prices by reducing shipping costs. The greater the discount on shipping expenses, the greater the consumer profit. Consequently, shoppers will be more inclined to make purchases. To improve the quality of service, the delivery service provider must also manage human resource fulfilment expeditiously. Even if the minimum quantity provided to customers of shipping services is modest, service differentiation through pricing may be viewed as highly effective. Even if the acceptance of the tracking system technology can be rated as simple, it earns a high score because of this.

5. Conclusions

In conclusion, this study indicates that most consumers use the logistics service for small package delivery. The consumer also did not believe the service provider needed to be available 24 hours per day, 7 days per week. Nevertheless, they prefer it if the provider provides the shipping day estimation. Following the results of the rate preference survey, the consumer study reveals that for the safety of the shipping process, it is important for providers to charge an additional fee for standard packaging. Additionally, the consumers are willing to pay more for the warranty of the package protection during the shipping process. Thus, the providers; service includes extra packaging based on the package type. Moreover, they need access to track the package in real-time using the provider's application or website. Hence, the courier and all the staff must update the package position during the shipping process.

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