

THE EFFECT OF SERVICE QUALITY, BRAND IMAGE, AND DELIVERY TIMELINESS ON CUSTOMER LOYALTY: EVIDENCE FROM J&T EXPRESS PEKANBARU BRANCH

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ABSTRACT

This study aims to examine the effects of service quality, brand image, and delivery timeliness on customer loyalty among users of J&T Express courier services at the Pekanbaru branch, Riau. The population of this study consisted of all J&T Express customers in Pekanbaru City. Since the population size was unknown, the sample was determined using Roscoe's rule of thumb, resulting in a total of 150 respondents. A non-probability sampling technique, specifically accidental sampling, was employed to select the respondents. Primary data were collected through structured questionnaires distributed directly to 150 J&T Express customers in Pekanbaru. The data were analyzed using multiple linear regression with the assistance of IBM SPSS software. The results indicate that service quality, brand image, and delivery timeliness all have a positive and significant effect on customer loyalty. These findings suggest that improving service quality, strengthening brand image, and ensuring delivery timeliness delivery are essential strategies for enhancing customer loyalty in the courier service industry.

Keywords: Service Quality; Brand Image; Delivery Timeliness; Customer Loyalty; J&T Express

PENGARUH KUALITAS PELAYANAN, CITRA MEREK, DAN KETEPATAN WAKTU PENGIRIMAN TERHADAP LOYALITAS PELANGGAN PADA EKSPEDISI J&T EXPRESS CABANG KOTA PEKANBARU

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh kualitas pelayanan, citra merek, dan ketepatan waktu pengiriman terhadap loyalitas pelanggan pada pengguna jasa ekspedisi J&T Express Cabang Kota Pekanbaru, Riau. Populasi dalam penelitian ini adalah seluruh pengguna jasa ekspedisi J&T Express di Kota Pekanbaru. Karena jumlah populasi tidak diketahui secara pasti, penentuan jumlah sampel dilakukan menggunakan pendekatan Roscoe, sehingga diperoleh sebanyak 150 responden. Teknik pengambilan sampel yang digunakan adalah non-probability sampling dengan metode accidental sampling. Data primer dikumpulkan melalui penyebaran kuesioner secara langsung kepada 150 pelanggan J&T Express di Kota Pekanbaru. Analisis data dilakukan menggunakan regresi linier berganda dengan bantuan perangkat lunak IBM SPSS. Hasil penelitian menunjukkan bahwa kualitas pelayanan, citra merek, dan ketepatan waktu pengiriman berpengaruh positif dan signifikan terhadap loyalitas pelanggan. Temuan ini mengindikasikan bahwa peningkatan kualitas pelayanan, penguatan citra merek, serta konsistensi dalam ketepatan waktu pengiriman merupakan strategi penting untuk meningkatkan loyalitas pelanggan pada industri jasa ekspedisi.

Kata Kunci: Kualitas Pelayanan, Citra Merek; Ketepatan Waktu Pengiriman; Loyalitas Pelanggan; J&T Express

INTRODUCTION

The development of the business sector in the era of globalization has accelerated significantly, particularly in the field of technology. In this era, shopping activities have become increasingly digitalized, with consumers predominantly purchasing goods and services online to fulfill their daily needs. The rapid advancement of technology has gradually transformed consumer behavior, creating substantial business opportunities in the logistics and courier service industry. Courier or expedition services refer to businesses that provide goods delivery services between cities and countries. The rapid growth of the logistics industry has also been driven by the increasing number of online businesses and e-commerce platforms, making delivery services an essential component in ensuring that products reach consumers efficiently during online transactions. According to a survey conducted by Populix (2023) involving 920 respondents, approximately 88% of respondents reported using logistics delivery services more than once per month. These findings indicate that logistics services have become an indispensable part of modern society. Currently, Indonesia has a large number of land-based logistics companies, ranging from small-scale local businesses to large multinational corporations with international branch networks. Major courier service providers operating in Indonesia include SiCepat, JNE, J&T Express, SAP Express, Ninja Xpress, and TIKI.

J&T Group was established in August 2015 as Southeast Asia's first technology-based logistics company with e-commerce as its primary business focus. The company operates in various sectors, including express delivery, freight transportation, warehousing, and supply chain management, while providing intercity, interprovincial, and international delivery services. Within only three years of its establishment, J&T Express received the prestigious Top Brand Award 2018 in the category of the Best Courier Service in Indonesia (Source: Indotelko.com). The award was based on a survey conducted by the Frontier Consulting Group (FCG), which recognized J&T Express as the leading brand in the courier service category. The survey results are presented in Table 1.

Table 1. Top Brand Award Courier Service Category

Brand	2017	2018	2019	2020	2021	Category
J&T	-	13.9%	20.3%	21.3%	33.4%	TOP
JNE	49.9%	45.0%	25.4%	27.3%	28.0%	TOP
TIKI	34.7%	13.6%	12.6%	10.8%	11.2%	TOP
Pos Indonesia	8.4%	11.6%	5.4%	7.7%	8.5%	
DHL	1.3%	3.4%	3.8%	4.1%	6.0%	

Source: www.topbrand-award.com (2022)

Based on the Top Brand Award survey results, J&T Express consistently ranked among the top courier service brands and showed continuous improvement over the years, reaching the highest Top Brand Index in 2022. This achievement enabled J&T Express to surpass JNE, which had previously held the leading position. In addition to capturing JNE's market share, J&T Express has successfully competed with several well-established logistics companies that entered the Indonesian courier industry much earlier. Established companies such as JNE, Pos Indonesia, TIKI, and DHL had already built strong brand recognition and positive brand images among consumers. Nevertheless, J&T Express has successfully established a favorable brand image, attracting consumers to use its delivery services.

Today, J&T Express has become one of the most widely used courier service providers in Indonesia. The company is recognized for its extensive delivery network, fast shipping services, and convenient package tracking system. Moreover, its responsive customer service has become an additional factor attracting consumers. J&T Express has also established partnerships with numerous e-commerce platforms, making it a preferred logistics provider for both sellers and buyers. Combined with competitive pricing, these advantages have further strengthened its popularity among Indonesian consumers.

This is supported by a survey conducted by DataIndonesia.id between 25 August and 10 September 2022, involving respondents from 20 provinces across Indonesia. The survey found that 42.2% of respondents selected J&T Express as their preferred courier service for online shopping deliveries, followed by SiCepat (26.6%), JNE (23.1%), Ninja Xpress (2.5%), and Pos Indonesia (0.5%). These findings indicate that J&T Express was the most widely used logistics company among respondents across the surveyed provinces. The online survey involved 334 respondents and employed a simple random sampling technique with a 7% margin of error and a 95% confidence level.

The present study focuses on J&T Express Pekanbaru Branch, Riau, Indonesia. This branch was selected because, despite being a relatively new entrant compared with other long-established courier companies, J&T Express has successfully positioned itself alongside major logistics providers in Indonesia and has gained substantial consumer attention. To understand customers' perceptions of J&T Express in Pekanbaru, a preliminary survey was conducted involving 30 respondents residing in the city.

The preliminary survey revealed that 28 respondents had previously used J&T Express services, while only two respondents had never used the company. Furthermore, 27 respondents expressed satisfaction with the quality of J&T Express services, and the same number indicated that they would recommend the company to others. In addition, only six respondents stated that they would not use the service again, whereas 24 respondents expressed their intention to continue using J&T Express in the future. According to Hasan (2008), repeat purchasing behavior is one of the primary indicators of customer loyalty. Therefore, these findings suggest that customer loyalty toward J&T Express in Pekanbaru is relatively high.

The strong preference for J&T Express among residents of Pekanbaru has enabled the company to consistently achieve, and occasionally exceed, its shipment targets. The following section presents the target number of outbound shipments from Pekanbaru and the actual shipment achievements recorded by J&T Express Pekanbaru Branch.

Table 2. Shipment Volume of J&T Express Pekanbaru Branch Period 2017 to 2021

No.	Year	Target (Item)	Realisasi (Item)			
			Setiabudi Branch	Harapan Raya Branch	Payung Sekaki Branch	Panam Branch
1.	2017	230.000	212.400	200.100	215.800	202.400
2.	2018	230.000	241.500	234.600	230.050	231.000
3.	2019	230.000	254.700	235.320	259.567	243.275
4.	2020	230.000	268.113	236.780	324.843	251.376
5.	2021	230.000	284.488	279.531	330.488	276.932

Source : PT. J&T Express Pekanbaru (2023)

As presented in Table 2, during the five-year period from 2017 to 2021, the four branches of J&T Express in Pekanbaru experienced steady growth in shipment volume. Although the company did not achieve its shipment target during the early years following its establishment in 2015, all four branches successfully met—and even exceeded—the predetermined shipment targets from 2018 to 2021. This consistent increase reflects the growing demand for J&T Express delivery services and demonstrates the strong acceptance of the company's services among the residents of Pekanbaru.

Convincing customers to use land and air freight delivery services is not an easy task. Customers generally begin as first-time users who are willing to try a company's services. Long-term customer relationships are developed through mutually beneficial interactions between service providers and customers. When customers perceive that the services provided are reliable and capable of meeting their expectations, trust is established, encouraging them to continue using the same service provider. One effective strategy for maintaining customers is by fostering customer loyalty, which provides long-term benefits through repeat purchases and continuous service utilization. According to Hasan (2015), customer loyalty refers to customers who not only repeatedly purchase a company's products or services but also recommend them to others. Therefore, customer loyalty is considered one of the most important factors contributing to a company's long-term growth and profitability.

The first factor examined in this study is service quality. According to Tjiptono (2015), service quality is defined as the extent to which the services provided meet or exceed customer expectations. In other words, service quality reflects a company's ability to satisfy customer needs through reliable and superior service performance. For service-based companies, delivering high-quality service is essential for maintaining customer satisfaction and achieving sustainable business success. Similarly, Lewis and Booms (1983) define service quality as the degree to which the service delivered matches customer expectations. High service quality ultimately enhances customer satisfaction and encourages customers to continue using the service.

The second factor is brand image. Kotler and Keller (2016) define brand image as the set of perceptions, beliefs, and associations that consumers hold about a particular brand. Brand image plays a significant role in influencing consumer decisions because customers tend to trust and repeatedly choose brands that possess a positive reputation. Once a favorable brand image has been established in consumers' minds, they are less likely to switch to competing brands. Therefore, consumers generally prefer service providers with well-recognized brands, either based on their personal experiences or information obtained from various sources.

The third factor is delivery timeliness. Delivery timeliness is a critical determinant of customer satisfaction and loyalty because customers expect their orders to arrive within the promised delivery period. According to Aminah et al. (2017), delivery time refers to the period between placing an order and receiving the product. Customers commonly use the estimated delivery time as an indicator of service quality. Consequently, delivery timeliness reflects a logistics company's ability to fulfill its service commitments. When deliveries consistently arrive on schedule, customer trust increases, ultimately leading to stronger customer loyalty.

Based on the above discussion, this study aims to examine the effects of service quality, brand image, and delivery timeliness on customer loyalty among customers of J&T Express Pekanbaru Branch, Riau, Indonesia.

LITERATURE REVIEW

Customer Loyalty

Customer loyalty refers to a customer's commitment to continuously purchase and support a preferred product or service despite situational influences and marketing efforts that may encourage switching to competitors. In the context of service marketing, customer loyalty is regarded as a behavioral response closely associated with relational commitment, which is typically reflected in customers' continued use of the same service provider based on both emotional attachment and practical considerations (Tarigan et al., 2019). Similarly, Kotler (2008) defines customer loyalty as a deeply held commitment to repurchase or consistently patronize a preferred product or service in the future despite the influence of situational factors and marketing activities that may induce switching behavior. According to Hasan (2014), customer loyalty is measured using three indicators: repeat purchase, commitment to the product or service, and positive word-of-mouth recommendations.

Service Quality

Service quality refers to the relative excellence of a product or service, encompassing its characteristics and its ability to meet predetermined standards and customer expectations. According to Lupiyoadi (2016), service quality reflects a company's capability to deliver products and services that satisfy customers' needs and expectations. For service-oriented businesses, maintaining high service quality is essential for achieving customer satisfaction and long-term business success. Rahmayanty (2010) identifies five dimensions of service quality: reliability, responsiveness, assurance, tangibles, and empathy.

Brand Image

Brand image is an important marketing strategy used to attract consumers to purchase products or utilize services offered by a company. Pradana (2017) defines brand image as the overall impression formed through an individual's understanding and perception of a particular brand. In other words, brand image represents the collection of beliefs, perceptions, and associations that consumers develop based on their experiences and knowledge of a product or service. According to Azhari and Fachry (2020), brand image consists of four indicators: recognition, reputation, affinity, and domain.

Delivery Timeliness

Delivery timeliness refers to a company's ability to deliver products within the promised timeframe according to predetermined schedules, thereby minimizing customer complaints. Nistrom (2005) explains that delivery timeliness means that products arrive on the agreed delivery date; failure to meet this commitment may result in customer dissatisfaction. Hafizha (2019) defines delivery timeliness as the period between customers placing an order and receiving the purchased product. According to Juniariska (2020), delivery timeliness is measured using two indicators: the punctuality of goods arriving at their destination and the punctuality of goods being dispatched according to the scheduled delivery time.

Hypothesis Development

The Effect of Service Quality on Customer Loyalty

Service quality is considered one of the key factors influencing customers' commitment to repeatedly use a company's products or services, thereby contributing to increased business performance. High-quality service enables customers to accomplish their objectives more effectively and creates positive service experiences. When customers perceive that a company consistently provides reliable and satisfactory services, they are more likely to develop loyalty and continue using the company's services. As stated by Yulianto (2010), excellent service quality is one of the essential requirements for organizational success.

Previous studies conducted by Muhibbah (2022) and Putri (2017) found that service quality has a positive and significant effect on customer loyalty. However, these findings contradict the study by Normasari et al. (2019), which reported that service quality has no significant effect on customer loyalty.

H1: Service quality has a positive effect on customer loyalty at J&T Express Pekanbaru Branch.

The Effect of Brand Image on Customer Loyalty

Brand image represents consumers' overall perceptions and associations regarding a particular brand. A favorable brand image enhances customer trust, strengthens emotional attachment, and encourages customers to continue using the same products or services. Customers with positive perceptions of a brand are also more likely to recommend it to others, thereby reinforcing customer loyalty.

Previous studies by Widyana and Simangunsong (2021) and Ayu (2012) concluded that brand image has a positive and significant influence on customer loyalty. In contrast, Apriliani et al. (2020) found that brand image does not significantly affect customer loyalty.

H2: Brand image has a positive effect on customer loyalty at J&T Express Pekanbaru Branch.

The Effect of Delivery Timeliness on Customer Loyalty

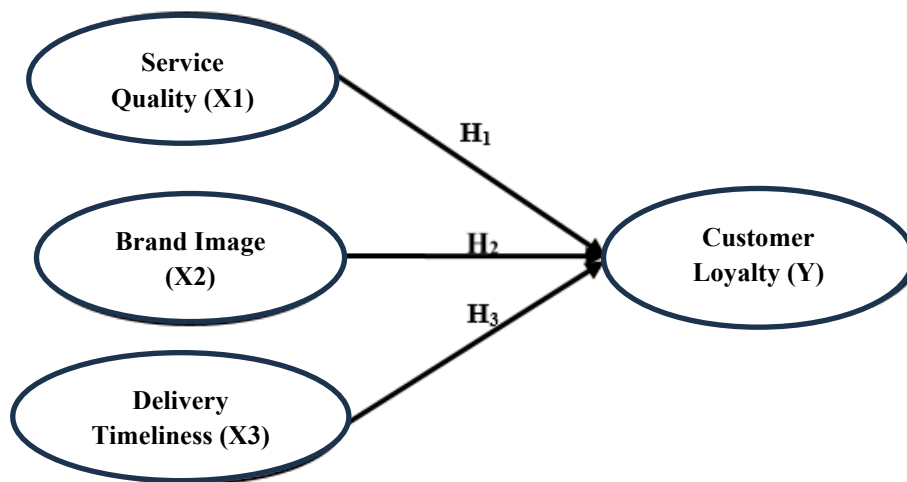
Delivery timeliness refers to the extent to which products are delivered according to the promised schedule. Delivery timeliness is an important aspect of customer service because it directly affects customer satisfaction and trust. Efficient and punctual delivery demonstrates the effectiveness of a company's logistics system and plays a significant role in encouraging customers to continue using its services. Consequently, maintaining delivery timeliness is a crucial strategy for developing and sustaining customer loyalty.

Supandi and Johan (2023) found that delivery timeliness has a positive effect on customer loyalty. Conversely, Sahara and Adelina (2024) reported that delivery timeliness does not significantly influence customer loyalty.

H3: Delivery timeliness has a positive effect on customer loyalty at J&T Express Pekanbaru Branch.

Conceptual Framework

Based on the theoretical framework discussed, the conceptual framework of this study is presented in Figure 1.



Source: Processed Data (2024)

Figure 1. Conceptual Framework

RESEARCH METHODOLOGY

Research Location and Period

This study was conducted in Pekanbaru City, Riau Province, Indonesia. The research was carried out over a four-month period, from September 2024 to December 2024.

Population and Sample

The population of this study consisted of all users of J&T Express courier services in Pekanbaru City. Since the exact number of J&T Express users in Pekanbaru could not be accurately identified due to limited data availability, the population size was considered unknown.

To determine the sample size for an unknown population, the study adopted Roscoe's rule of thumb, which suggested a minimum sample size of 120 respondents. To minimize the possibility of unusable or incomplete responses, the researchers increased the sample size to 150 respondents.

Operasional Definition of Variables

The operational definitions of the research variables, including their indicators, measurement scales, and supporting references, are presented in Table 3.

Data Types and Sources

This study employed both qualitative and quantitative data. Qualitative data consisted of non-numerical information, including descriptions, opinions, behaviors, activities, and other relevant characteristics. Quantitative data, on the other hand, consisted of numerical information that could be measured and statistically analyzed. The study utilized both primary and secondary data sources. Primary data were collected through a survey using structured questionnaires distributed to customers of J&T Express in Pekanbaru. Secondary data were obtained from the Top Brand Index, previous studies, scientific journal articles, and other relevant publications available through online sources.

Table 3. Operational Definition of Research Variables

No.	Research Variable	Indicator	Source	Scale
1	Service Quality	Realibility Responsiveness Assurance Tangibles Empathy	Rahmayanty (2010)	Interval
2	Brand Image	Recognition Reputation Affinity Domain	Azhari & Fachry (2020)	Interval
3	Delivery Timeliness	Timeliness of delivered goods arriving at the destination Timeliness of goods dispatch	Juniariska (2020)	Interval
4	Customer Loyalty	Repeat purchase Customer commitment to the product/service Word-to-mouth recommendation	Hasan (2014)	Interval

Source: Processed Data (2024)

Data Analysis Technique

To examine the effects of service quality, brand image, and delivery timeliness on customer loyalty among J&T Express customers in Pekanbaru, the collected data were initially analyzed using descriptive statistical analysis to summarize the characteristics of the respondents and the research variables. Descriptive analysis was conducted to organize, present, and interpret the data, thereby providing a comprehensive overview of the research variables.

Subsequently, the hypotheses were tested using multiple linear regression analysis with the assistance of SPSS software. Prior to conducting the regression analysis, the data were subjected to validity and reliability tests, as well as classical assumption tests, including normality, multicollinearity, and heteroscedasticity tests. The significance of the individual effects of service quality, brand image, and delivery timeliness on customer loyalty was examined using the t-test, while their simultaneous effect was evaluated using the F-test. The coefficient of determination (R^2) was also used to assess the extent to which the independent variables explained variations in customer loyalty.

RESULTS AND DISCUSSION

This section presents the research findings and discussion. The descriptive analysis in Table 4 summarizes the respondents' characteristics based on gender, age, occupation, district of residence, and monthly income.

Based on the questionnaire survey, the respondents' demographic characteristics were analyzed based on gender, age, occupation, and monthly income. As presented in Table 4, the majority of respondents were female, accounting for 80 respondents (52.7%), while 70 respondents (47.3%) were male. This finding may indicate that female consumers are generally more active in online shopping and tend to be more selective when choosing courier service providers.

In terms of age, the largest proportion of respondents belonged to the 21–30 years age group, comprising 77 respondents (51%). This was followed by respondents aged 20 years or younger (24 respondents; 16%), those aged 31–35 years (27 respondents; 18%), and respondents aged over 35 years (22 respondents; 15%). The dominance of the 21–30 age group suggests that young adults represent the primary users of courier services, as they are generally more engaged in online shopping activities and place greater importance on timely and reliable delivery services.

Regarding occupation, 51 respondents (34%) were students, 5 respondents (4%) were government employees, 34 respondents (23%) were private-sector employees, 20 respondents (13%) were homemakers, 25 respondents (17%) were entrepreneurs, and 15 respondents (9%) reported other occupations. The predominance of students is consistent with the age distribution, as most respondents were between 21 and 30 years old, an age range typically associated with higher education.

Based on monthly income, 75 respondents (50%) earned less than IDR 3,000,000 per month, 49 respondents (33%) reported monthly incomes ranging from IDR 3,000,000 to IDR 5,000,000, and 26 respondents (17%) earned more than IDR 5,000,000 per month. The relatively large proportion of respondents with monthly incomes below IDR 3,000,000 is likely attributable to the high percentage of student respondents, many of whom have not yet entered the workforce on a full-time basis.

Table 4. Demographic Characteristics of the Respondents

Gender	Total Respondent	Percentage (%)
Female	80	52,7%
Male	70	47,3%
Total	150	100%
Age Group	Total Respondent	Percentage (%)
≤ 20 years old	24	16%
21 – 30 years old	77	51%
31 – 35 years old	27	18%
>35 years old	22	15%
Total	150	100%
Occupation	Total Respondent	Percentage (%)
Student	51	34%
Government Employee	5	4%
Private Sector Employee	34	23%
Housewife	20	13%
Entrepreneur	25	17%
Others	15	9%
Total	150	100%
Monthly Income	Total Respondent	Percentage (%)
< Rp.3000.000	75	50%
Rp.3000.000 – Rp.5000.000	49	33%
>Rp.5.000.000	26	17%
Total	150	100%

Source: Processed Data (2024)

Analysis of Respondents' Responses

Table 5. Respondents' Responses to the Research Variables

Variable	Statement	Average	Variable Average	Result
Service Quality (X1)	Realibility	4.03	3.98	Good
	Responsiveness	3.97		
	Assurance	3.85		
	Tangibles	3.96		
	Empathy	4.09		
Brand Image (X2)	Recognition	4.06	3.99	Good
	Reputation	3.93		
	Keunggulan Produk (<i>Affinity</i>)	3.89		
	Domain	4.09		
Delivery Timeliness (X3)	Timeliness of delivered goods arriving at the destination	3.96	3.97	Good
	Timeliness of goods dispatch	3.98		
Loyalitas Pelanggan (Y)	Repeat purchase	3.98	4.00	High
	Customer commitment to the product/service	3.96		
	Word-to-mouth recommendation	4.06		

Source: SPSS Processed Data (2024)

Based on Table 5, respondents perceived service quality to be good, with a mean score of 3.98. This finding indicates that customers generally viewed the quality of services provided by J&T Express branches in Pekanbaru positively. The consistently favorable perception of service quality is likely to strengthen the company's competitiveness and position J&T Express as one of the preferred courier service providers in Pekanbaru.

Similarly, brand image was also rated good, with a mean score of 3.99. This result suggests that respondents held positive perceptions of the J&T Express brand. The company's ability to maintain a favorable reputation and consistently deliver customers' shipments has contributed to strengthening its brand image and increasing customers' confidence in its services. The delivery timeliness variable also received a good evaluation, with an average score of 3.97. This finding indicates that respondents generally perceived J&T Express as providing delivery timeliness services and accurate shipment information, thereby enhancing customers' overall service experience. Meanwhile, customer loyalty obtained the highest mean score of 4.00, indicating a high level of customer loyalty. This suggests that customers were generally satisfied with the services provided by J&T Express and demonstrated strong loyalty by expressing their willingness to continue using the company's services and recommending them to friends and family.

Validity and Reliability Tests

Table 6. Validity and Reliability Tests Result

Variable	Indicator	CITC Value	Critical Value	Cronbach's Alpha
Service Quality (X1)	X1.1.1	0,312	0,300	0,829
	X1.1.2	0,496		
	X1.2.1	0,455		
	X1.2.2	0,586		
	X1.3.1	0,577		
	X1.3.2	0,521		
	X1.4.1	0,551		
	X1.4.2	0,512		
	X1.5.1	0,572		
	X1.5.2	0,595		
Brand Image (X2)	X2.1.1	0,522	0,300	0,820
	X2.1.2	0,533		
	X2.2.1	0,606		
	X2.2.2	0,641		
	X2.3.1	0,485		
	X2.3.2	0,522		
	X2.4.1	0,472		
	X2.4.2	0,542		
Delivery Timeliness (X3)	X3.1.1	0,514	0,300	0,723
	X3.1.2	0,493		
	X3.2.1	0,497		
	X3.2.2	0,543		
Customer Loyalty (Y)	Y.1.1	0,531	0,300	0,817
	Y.1.2	0,573		
	Y.2.1	0,578		
	Y.2.2	0,569		
	Y.3.1	0,539		
	Y.3.2	0,694		

Sumber: Hasil Olah Data SPSS (2024)

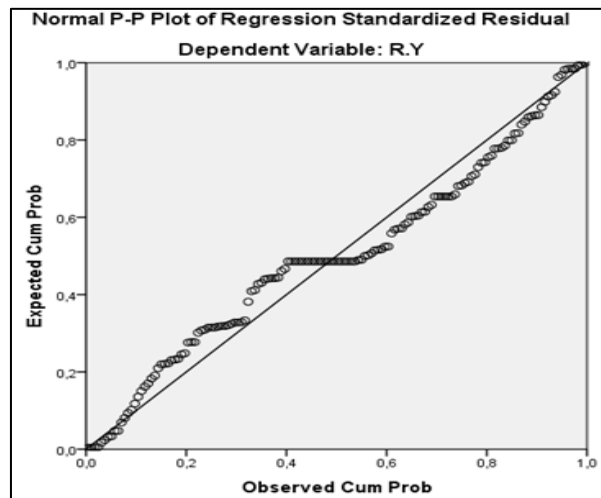
Based on Table 6, all measurement indicators exhibited corrected item-total correlation (CITC) values greater than 0.300, indicating that all questionnaire items were valid. Furthermore, the Cronbach's alpha (α) values for all variables exceeded the minimum acceptable threshold of 0.60, demonstrating satisfactory internal consistency and confirming that the measurement instruments were reliable. These findings indicate that all research variables met the validity and reliability requirements and were therefore suitable for subsequent statistical analyses. Since the preliminary measurement tests revealed no significant issues regarding the quality of the research instruments, the study proceeded with the next stage of analysis, namely the classical assumption tests.

Classical Assumption Tests

Normality Test

Based on the Normal P-P Plot presented in Figure 2, the data points are distributed closely around the diagonal reference line, with no substantial deviations observed. The distribution of the points follows the diagonal line consistently, indicating that the residuals are approximately normally distributed. Therefore, the visual inspection

suggests that the normality assumption has been satisfied. However, because the interpretation of graphical methods may be subjective, the normality of the data was further verified using the Kolmogorov–Smirnov (K–S) test. The results of the statistical normality test are presented in Table 7.



Source: SPSS Processed Data (2024)

Figure 2. Normality P-Plot Test Result

Table 7. Normality Test Result (Kolmogorov-Smirnov Test)

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		150
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,37657073
Most Extreme Differences	Absolute	,087
	Positive	,082
	Negative	-,087
Kolmogorov-Smirnov Z		1,065
Asymp. Sig. (2-tailed)		,206

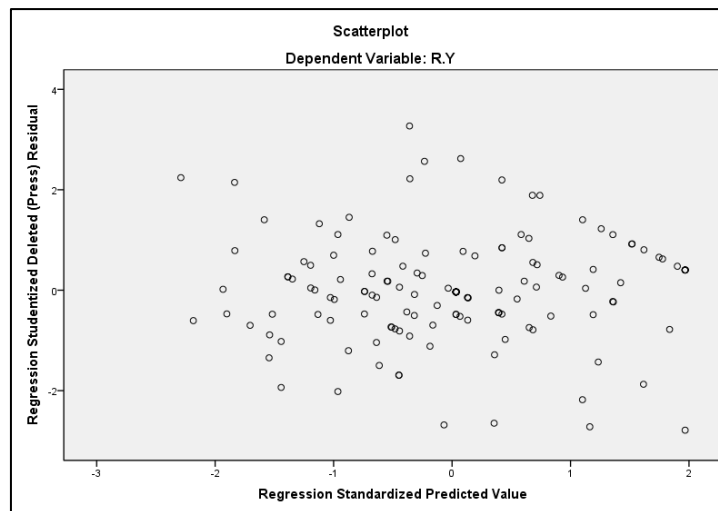
Source: SPSS Processed Data (2024)

Based on the results of the Kolmogorov–Smirnov normality test, the significance value obtained was 0.206, which is greater than the significance threshold of 0.05. This result indicates that the data are normally distributed, and therefore, the normality assumption has been satisfied. Consequently, the data are considered appropriate for further statistical analyses.

Heteroscedasticity Test

Based on the scatterplot presented in Figure 3, the residuals are randomly dispersed without forming any discernible pattern and are distributed both above and below the zero line on the Y-axis. This random distribution indicates that the variance of the residuals remains constant across the predicted values. Therefore, the regression model is considered free from heteroscedasticity. To further confirm this result, the Glejser test was also performed. In the Glejser test, heteroscedasticity is considered absent when the significance value of each independent variable is greater than 0.05. The results of the Glejser test are presented in Table 8.

Based on the Glejser test results presented in Table 8, all independent variables have significance values greater than 0.05. This indicates that there is no significant relationship between the absolute residuals and the independent variables. Therefore, no evidence of heteroscedasticity was found, indicating that the regression model satisfies the homoscedasticity assumption.



Sumber: Hasil Olah Data SPSS (2024)

Gambar 3. Heteroscedasticity Test Result

Table 8. Heteroscedasticity Test Result (Glejser Test)

No	Variable	Sig	Alpha	Conclusion
1	Service Quality (X1)	0,403	0,05	No Heteroscedasticity Detected
2	Brand Image (X2)	0,149		No Heteroscedasticity Detected
3	Delivery Timeliness (X3)	0,407		No Heteroscedasticity Detected

Source: SPSS Processed Data (2024)

Multicollinearity Test

Table 9. Multicollinearity Test Result

Variable	Collinearity Statistics		Conclusion
	Tolerance	VIF	
Service Quality (X1)	0.230	4,355	No multicollinearity detected
Brand Image(X2)	0.227	4,408	No multicollinearity detected
Delivery Timeliness (X3)	0.352	2,839	No multicollinearity detected

Source: SPSS Processed Data (2024)

Based on the multicollinearity test results presented in Table 9, all independent variables have tolerance values greater than 0.10 and Variance Inflation Factor (VIF) values below 10.00, indicating that the regression model is free from multicollinearity. Specifically, the service quality variable has a tolerance value of 0.230 and a VIF of 4.355, the brand image variable has a tolerance value of 0.227 and a VIF of 4.408, while the delivery timeliness variable has a tolerance value of 0.352 and a VIF of 2.839. These results indicate that no significant multicollinearity exists among the independent variables, confirming that the regression model satisfies the multicollinearity assumption.

Model Fit Test

F-Test

Based on the F-test results presented in Table 10, the regression model is statistically significant, with a significance value of 0.000, which is lower than the significance level of 0.05. This indicates that service quality, brand image, and delivery timeliness jointly have a significant effect on customer loyalty among J&T Express customers in Pekanbaru.

Table 10. F-Test Result

Model	F-statistic	F-table	Sig.	Conclusion
Regression	64,115	1.655	0,000	Significant influence

Source: SPSS Processed Data (2024)

Coefficient of Determination Test (R^2)

Table 11. Coefficient of Determination Test Result

Model	R	R Square	Adjusted R Square
1	0,754	0,568	0,560

Source: SPSS Processed Data (2024)

Table 11 shows that the Adjusted R^2 value is 0.560, indicating that 56.0% of the variation in customer loyalty can be explained by the independent variables, namely service quality, brand image, and delivery timeliness. The remaining 44.0% of the variation is explained by other factors that were not included in this study.

Multiple Linear Regression Analysis

Table 12. Multiple Linear Regression Analysis Result– Model I, II and III

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	0,669	0,243	
1 R.X1	0,283	0,122	0,263
R.X2	0,330	0,120	0,315
R.X3	0,223	0,090	0,228

Source: SPSS Processed Data (2024)

Based on the results presented in Table 12, the multiple linear regression equation can be expressed as follows:

$$Y = 0,669 + 0,283X_1 + 0,330X_2 + 0,223X_3$$

The regression model indicates that the constant (intercept) is 0.669, suggesting that when all independent variables—service quality (X_1), brand image (X_2), and delivery timeliness (X_3)—are held constant at zero, the predicted value of customer loyalty (Y) is 0.669. The regression coefficient for service quality (X_1) is 0.283, indicating a positive relationship with customer loyalty (Y). This result suggests that, holding the other variables constant, a one-unit increase in service quality is associated with a 0.283-unit increase in customer loyalty. Similarly, the regression coefficient for brand image (X_2) is 0.330, indicating a positive relationship with customer loyalty. This implies that a one-unit improvement in brand image is associated with a 0.330-unit increase in customer loyalty, assuming the other variables remain constant. Furthermore, the regression coefficient for delivery timeliness (X_3) is 0.223, indicating a positive relationship with customer loyalty. This finding suggests that a one-unit increase in delivery timeliness is associated with a 0.223-unit increase in customer loyalty, while holding the other independent variables constant.

Hypothesis Test (t-Test)

Table 13. Hypothesis Test Result

Variable	T _{statistic}	t _{table}	Sig	Conclusion
Service Quality (X1)	2,322	1,976	0,022	Positive and significant
Brand Image (X2)	2,760	1,976	0,007	Positive and significant
Delivery Timeliness (X3)	2,489	1,976	0,014	Positive and significant

Source: SPSS Processed Data (2024)

The results of the partial hypothesis test (t-test) in Table 13 indicate that service quality has a positive and significant effect on customer loyalty, with a t-value of 2.322, which exceeds the critical value ($t = 1.976$), and a p-value of 0.022, which is below the significance level of 0.05. Therefore, H1 is supported, indicating that higher service quality is associated with higher customer loyalty among J&T Express customers in Pekanbaru, Riau. Similarly, brand image has a positive and significant effect on customer loyalty ($t = 2.760$, $p = 0.007 < 0.05$). Accordingly, H2 is supported, suggesting that a more favorable brand image contributes to higher customer loyalty. Furthermore, delivery timeliness also has a positive and significant effect on customer loyalty ($t = 2.489$, $p = 0.014 < 0.05$). Thus, H3 is supported, indicating that more timely delivery services are associated with greater customer loyalty.

The Effect of Service Quality, Brand Image, and Delivery Timeliness on Customer Loyalty: Evidence from J&T Express Pekanbaru Branch (Jennifer Chandra and Junaida)

Discussion

The Effect of Service Quality on Customer Loyalty

The descriptive analysis indicates that respondents generally perceived the quality of services provided by J&T Express as good. The multiple linear regression analysis revealed a positive relationship between service quality and customer loyalty. Furthermore, both the F-test and the t-test confirmed that service quality has a statistically significant positive effect on customer loyalty.

Among the service quality indicators, the statement "J&T Express employees always behave professionally when serving customers" received the highest mean score (4.15), indicating that respondents generally perceived J&T Express employees as professional and capable of delivering satisfactory services. In contrast, the statement "J&T Express provides compensation for lost packages at no additional cost" received the lowest mean score (3.84), suggesting that customers perceived the company's package protection policy less favorably than other aspects of service quality.

Overall, these findings indicate that service quality has a positive and significant effect on customer loyalty. This suggests that maintaining and continuously improving service quality can strengthen customer loyalty toward J&T Express in Pekanbaru. The findings are consistent with previous studies conducted by Prasady (2022), Muhibbah (2022), and Putri (2017), all of which reported that service quality has a positive and significant influence on customer loyalty.

The Effect of Brand Image on Customer Loyalty

The descriptive analysis indicates that respondents generally perceived the brand image of J&T Express positively. The results of the multiple linear regression analysis revealed that brand image has a positive and significant effect on customer loyalty, indicating that a stronger brand image is associated with higher customer loyalty.

Among the brand image indicators, the statement "J&T Express provides delivery services throughout Indonesia, including major cities and remote areas" received the highest mean score (4.17). This finding suggests that respondents highly value the extensive service coverage offered by J&T Express, which enhances the company's brand image and strengthens customers' confidence in its services. In contrast, the statement "J&T Express has become the first choice for many businesses and individuals due to its consistently high-quality services" received the lowest mean score. This indicates that, although respondents generally have a favorable perception of the company's brand, J&T Express has not yet become the primary courier service provider for all customers in Pekanbaru.

Overall, the findings demonstrate that brand image has a positive and significant effect on customer loyalty. Maintaining a positive corporate image and strengthening customers' trust in the brand are therefore essential strategies for enhancing customer loyalty. These findings are consistent with previous studies conducted by Yanto et al. (2020), Widyana and Simangunsong (2021), and Ayu (2012), which also reported that brand image positively and significantly influences customer loyalty.

The Effect of Delivery Timeliness on Customer Loyalty

The descriptive analysis indicates that respondents generally perceived delivery timeliness positively. The multiple linear regression analysis further revealed that delivery timeliness has a positive and significant effect on customer loyalty, suggesting that more reliable and punctual delivery services contribute to stronger customer loyalty.

Regarding customer loyalty indicators, the statement "I would recommend J&T Express to my friends or family" obtained the highest mean score (4.08). This finding suggests that respondents were generally satisfied with the services provided by J&T Express and were willing to recommend the company to others. Conversely, the statement "I will use J&T Express for my business shipping needs" received the lowest mean score (3.94), indicating that some respondents were still hesitant to rely exclusively on J&T Express for their business activities.

Overall, the findings indicate that delivery timeliness has a positive and significant effect on customer loyalty. This suggests that consistently delivering shipments within the promised timeframe can strengthen customer trust and encourage repeat usage of J&T Express services. The findings are consistent with those reported by Trimarjono (2023), Supandi and Johan (2023), and Sahara and Adelina (2024), all of whom found that delivery timeliness positively and significantly affects customer loyalty.

CONCLUSION

This study aimed to examine the effects of service quality, brand image, and delivery timeliness on customer loyalty among J&T Express customers in Pekanbaru. The findings indicate that service quality has a positive and significant effect on customer loyalty, suggesting that improvements in service quality are associated with higher levels of customer loyalty. Similarly, brand image was found to have a positive and significant effect on customer loyalty, indicating that a stronger brand image contributes to greater customer loyalty. Furthermore, delivery timeliness also has a positive and significant effect on customer loyalty, implying that timely delivery services play an important role in fostering customer loyalty. The results further show that the independent variables—

service quality, brand image, and delivery timeliness—collectively explain 56.0% of the variation in customer loyalty, while the remaining 44.0% is attributable to other factors not included in this study.

This study has several limitations. First, only three independent variables—service quality, brand image, and delivery timeliness—were examined, whereas customer loyalty may also be influenced by other factors that were not included in this research. Second, because the population size of J&T Express customers in Pekanbaru was unknown, the sample size was determined using Roscoe's rule of thumb, resulting in 150 respondents. Finally, the study relied on self-administered questionnaires, which may have introduced response bias because respondents' answers may not have fully reflected their actual perceptions or experiences.

Future studies are encouraged to incorporate additional variables that may influence customer loyalty, such as customer satisfaction, perceived value, trust, price perception, electronic service quality, or customer experience, in order to improve the explanatory power of the research model. From a managerial perspective, the findings suggest that J&T Express should continue to enhance service quality, strengthen its brand image, and maintain delivery timeliness, as these factors have been shown to contribute significantly to customer loyalty.

REFERENCES

- Aminah et al. (2017). Analisis Pengaruh Kualitas Pelayanan, Ketepatan Waktu Pengiriman Dan Fasilitas Terhadap Kepuasan Pelanggan. *Diponegoro Journal of Management*.
- Apriliani, D., Baqiyyatus S, N., Febila, R., & Sanjaya, V. F. (2020). *Pengaruh Kepuasan Pelanggan, Brand Image, dan Kepercayaan Pelanggan Terhadap Loyalitas Pelanggan pada Membercard*.
- Ayu, D. (2012). *Pengaruh Citra Merek (Brand Image) Terhadap Loyalitas Konsumen Produk Oli Pelumas PT. Pertamina (Persero) Enduro 4T Di Makassar*.
- Booms, L. &. (1983). *Pengaruh Kualitas Produk, Kualitasn Pelayanan Dan Harga Terhadap Kepuasan Konsumen*. <https://doi.org/10.61069/juri.v1i3.19>
- Dedhy Pradana. (2017). *Pengaruh Citra Merek (Brand Image) Terhadap Keputusan Pembelian Kerudung Deenay (Studi pada Konsumen Gea Fashion Banjar)*.
- Fachry, A. &. (2020). *Pengaruh Brand Image, Brand Trust Dan Promosi Terhadap Keputusan Pembelian Jasa Pada Visa Agent Bali, Canggü*.
- Hafizha. (2019). *Pengaruh Trust Dan Delivery Accuracy Terhadap Loyalitas Pelanggan Dalam Menggunakan Jasa Pengiriman J&T Express*.
- Hasan. (2008). *Pengaruh Kualitas Layanan Dan Kepuasan Pelanggan Pada J&T Express Cabang Talasalapang Makassar*.
- Hasan. (2015). *Loyalitas Pelanggan Berdasarkan Kualitas Pelayanan Dan Kepuasan Pelanggan*. 2507(February), 1–9.
- Juniariska. (2020). *Pengaruh Kualitas Pelayanan, Ketepatan Waktu Pengiriman, dan Fasilitas Terhadap Kepuasan Pelanggan Ekspedisi Lion Parcel Di Batam*.
- Keller, K. &. (2016). Pengaruh Citra Merek, Kualitas Produk, Dan Promosi Terhadap Keputusan Pembelian Konsumen Pada Seikou Coffee Depok. *Ikraith-Ekonomika*, 5(1), 31–38.
- Kotler. (2008). *Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan Dalam Membentuk Loyalitas Pelanggan*.
- Lupiyadi. (2016). *Pengaruh Kualitas Pelayanan Dan Citra Merek Terhadap Kepuasan Pelanggan J&T Express Pada Masa Pandemi COVID-19*. <https://doi.org/818>
- Muhibbah, R. I. (2022). *Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan Sebagai Variabel Intervening*.
- Nistrom. (2005). *Pelanggan Pada Jasa Pengiriman J & T Express Cabang Tanon*.
- Prasadaty, M. G. (2022). Pengaruh Keragaman Produk dan Kualitas Pelayanan terhadap Loyalitas Pelanggan dengan Kepuasan Pelanggan sebagai Variabel Mediasi di Alfamidi. *Jurnal Manajemen Dan Bisnis*, 83.
- Putri, Y. L. (2017). *Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pelanggan Dengan Kepuasan Sebagai Variabel Intervening*. <https://doi.org/10.52353/ama.v10i1.147>
- Sahara, S. dan F. A. (2024). *Analisis Kualitas Pelayanan Dan Ketepatan Waktu Pengiriman Terhadap Loyalitas Pelanggan Di Ekspedisi JNE Kota Tangerang*.
- Selvy Normasari, Srikandi Kumadji, A. K. (2019). *Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan, Citra Perusahaan Dan Loyalitas Pelanggan*.
- Supandi, A., & Johan, R. S. (2023). *Pengaruh Ketepatan Waktu terhadap Loyalitas Pelanggan PT. Fajar Citra Mandiri*.
- Tarigan, H. I. (2019). *Pengaruh Kualitas Pelayanan Pelanggan Terhadap Loyalitas Pelanggan J&T Express Cabang Kandis Riau*.
- Tjiptono, F. (2015). Analisis Pengaruh Kualitas Pelayanan Dan Harga Terhadap Kepuasan Pelanggan Dalam Menggunakan Jasa Transportasi Online Grab. *Jurnal Ekonomi Dan Bisnis*, 8(1), 94–100.
- Trimarjono, A. &. (2023). *Pengaruh Kualitas Pelayanan Dan Ketepatan Waktu Pengiriman Terhadap Loyalitas Pelanggan Dengan Kepuasan Pelanggan Sebagai Variabel Mediasi Pada J&T Express Ptc Surabaya*.

- Widyana, S. F., & Simangunsong, R. (2021). *Pengaruh Citra Merek Terhadap Loyalitas Pelanggan (Studi Pada Teh Pucuk Harum)*.
- Yanto, E., Herman Pengaruh Promosi dan Citra Merek, H., Yanto, E., & Herman, H. (2020). Pengaruh Promosi Dan Citra Merek Terhadap Loyalitas Pelanggan Pada Pt. Tiga Benua. *Jurnal Emba Ekonomi Manajemen*.
- Yulianto. (2010). *Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan*.
- Aminah et al. (2017). Analisis Pengaruh Kualitas Pelayanan, Ketepatan Waktu Pengiriman Dan Fasilitas Terhadap Kepuasan Pelanggan. *Diponegoro Journal of Management*.
- Apriliani, D., Baqiyyatus S, N., Febila, R., & Sanjaya, V. F. (2020). *Pengaruh Kepuasan Pelanggan, Brand Image, dan Kepercayaan Pelanggan Terhadap Loyalitas Pelanggan pada Membercard*.
- Ayu, D. (2012). *Pengaruh Citra Merek (Brand Image) Terhadap Loyalitas Konsumen Produk Oli Pelumas PT. Pertamina (Persero) Enduro 4T Di Makassar*.
- Booms, L. &. (1983). *Pengaruh Kualitas Produk, Kualitasn Pelayanan Dan Harga Terhadap Kepuasan Konsumen*. <https://doi.org/10.61069/juri.v1i3.19>
- Dedhy Pradana. (2017). *Pengaruh Citra Merek (Brand Image) Terhadap Keputusan Pembelian Kerudung Deenay (Studi pada Konsumen Gea Fashion Banjar)*.
- Fachry, A. &. (2020). *Pengaruh Brand Image, Brand Trust Dan Promosi Terhadap Keputusan Pembelian Jasa Pada Visa Agent Bali, Cangu*.
- Hafizha. (2019). *Pengaruh Trust Dan Delivery Accuracy Terhadap Loyalitas Pelanggan Dalam Menggunakan Jasa Pengiriman J&T Express*.
- Hasan. (2008). *Pengaruh Kualitas Layanan Dan Kepuasan Pelanggan Pada J&T Express Cabang Talasalapang Makassar*.
- Hasan. (2015). *Loyalitas Pelanggan Berdasarkan Kualitas Pelayanan Dan Kepuasan Pelanggan*. 2507(February), 1–9.
- Juniariska. (2020). *Pengaruh Kualitas Pelayanan, Ketepatan Waktu Pengiriman, dan Fasilitas Terhadap Kepuasan Pelanggan Ekspedisi Lion Parcel Di Batam*.
- Keller, K. &. (2016). Pengaruh Citra Merek, Kualitas Produk, Dan Promosi Terhadap Keputusan Pembelian Konsumen Pada Seikou Coffee Depok. *Ikraith-Ekonomika*, 5(1), 31–38.
- Kotler. (2008). *Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan Dalam Membentuk Loyalitas Pelanggan*.
- Lupiyadi. (2016). *Pengaruh Kualitas Pelayanan Dan Citra Merek Terhadap Kepuasan Pelanggan J&T Express Pada Masa Pandemi COVID-19*. <https://doi.org/818>
- Muhibbah, R. I. (2022). *Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan Sebagai Variabel Intervening*.
- Nistrom. (2005). *Pelanggan Pada Jasa Pengiriman J & T Express Cabang Tanon*.
- Prasadaty, M. G. (2022). Pengaruh Keragaman Produk dan Kualitas Pelayanan terhadap Loyalitas Pelanggan dengan Kepuasan Pelanggan sebagai Variabel Mediasi di Alfamidi. *Jurnal Manajemen Dan Bisnis*, 83.
- Putri, Y. L. (2017). *Pengaruh Kualitas Pelayanan Terhadap Loyalitas Pelanggan Dengan Kepuasan Sebagai Variabel Intervening*. <https://doi.org/10.52353/ama.v10i1.147>
- Sahara, S. dan F. A. (2024). *Analisis Kualitas Pelayanan Dan Ketepatan Waktu Pengiriman Terhadap Loyalitas Pelanggan Di Ekspedisi JNE Kota Tangerang*.
- Selvy Normasari, Srikandi Kumadji, A. K. (2019). *Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan, Citra Perusahaan Dan Loyalitas Pelanggan*.
- Supandi, A., & Johan, R. S. (2023). *Pengaruh Ketepatan Waktu terhadap Loyalitas Pelanggan PT. Fajar Citra Mandiri*.
- Sumber: Populix Indonesia Outlook (2023)
- Sumber: www.topbrand-award.com (2022)
- Tarigan, H. I. (2019). *Pengaruh Kualitas Pelayanan Pelanggan Terhadap Loyalitas Pelanggan J&T Express Cabang Kandis Riau*.
- Tjiptono, F. (2015). Analisis Pengaruh Kualitas Pelayanan Dan Harga Terhadap Kepuasan Pelanggan Dalam Menggunakan Jasa Transportasi Online Grab. *Jurnal Ekonomi Dan Bisnis*, 8(1), 94–100.
- Trimarjono, A. &. (2023). *Pengaruh Kualitas Pelayanan Dan Ketepatan Waktu Pengiriman Terhadap Loyalitas Pelanggan Dengan Kepuasan Pelanggan Sebagai Variabel Mediasi Pada J&T Express Ptc Surabaya*.
- Widyana, S. F., & Simangunsong, R. (2021). *Pengaruh Citra Merek Terhadap Loyalitas Pelanggan (Studi Pada Teh Pucuk Harum)*.
- Yanto, E., Herman Pengaruh Promosi dan Citra Merek, H., Yanto, E., & Herman, H. (2020). Pengaruh Promosi Dan Citra Merek Terhadap Loyalitas Pelanggan Pada Pt. Tiga Benua. *Jurnal Emba Ekonomi Manajemen*.
- Yulianto. (2010). *Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Pelanggan*.