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Brand quality in the sphere of transportation and expedition services development in a corporation

Abstract. The XYZ Corporation is a state-owned company in the field of freight, expedition, and transportation services in Indonesia. The company's main competitors are PT JNE, J&T, and TIKI. Even though XYZ Corporation started operations earlier, it is less competitive than its rivals. Therefore, this study analyses the relationship between brand loyalty, perceived quality, brand awareness, brand equity and brand associations on purchasing decisions for freight forwarding services at XYZ Corporation. We applied a quantitative descriptive method, and the data was obtained in 2022 using a questionnaire, namely online and offline. We examined four exogenous variables (perceived quality, brand association, brand loyalty, and brand awareness) and their relation to the five endogenous variables (brand equity, need recognition, information seeking, evaluation of alternatives, and purchase decisions). The measurement scale used in this questionnaire is a Likert scale (1-5). Data processing in the form of validity, significance, regression weight, reliability, and goodness of fit models were done. Data was then analyzed using the SEM model.
The results show that brand loyalty, perceived quality, brand awareness, equity, and brand associations influence purchasing decisions. This means that the decision to use expedition services is determined by brand loyalty, perceived quality, brand awareness, and brand associations. This research implies that XYZ Corporation should change its service and business procedures to be better, or at least equivalent to some other services, to become the main focus in providing services.
Keywords: Transportation; Expedition; Service; Influence; Relationship; Correlation; Development; Company Corporation; XYZ Corporation

1. Introduction

The Indonesian government owns a state-owned enterprise in the field of shipping services. Its history dates back to August 26, 1746, when Indonesians first heard of the company when they had the lowest level of education (kindergarten or elementary school), making its brand very familiar but not as familiar as that of other private companies. XYZ Corporation is still ranked fourth (https://www.xyz.vc/). Brand equity can describe the product's position in public perception (Fermann & Paletta 2022; Chen et al., 2019); survey data from XYZ Corporation is still a brand that has not become the customer's main choice in shipping services. At the same time, compared to new delivery services such as J&T and Tiki, established around 2015. The XYZ Corporation can compete and win the market field first, especially since the network in Indonesia is extensive and

capable because the network has been built for a long time. XYZ Corporation's management develops and maintains hopes that the market follower's original position can be increased to become a market challenger position (Abdul Razzaq et al., 2017). Vertically integrated drop- shipping model method to improve supplier-retailer coordination performance.

For this reason, an increase in service action is needed continuously to strengthen its position in the shipping service market (Chang et al., 2019; Sumadi et al., 2020). For this reason, a measurement model is needed that can be used as a guide in improving the position of XYZ Corporation as the management expects that the existing network coverage now can be broader and more known. The measurement model is composed of four exogenous variables: brand awareness (X1), perceived quality (X2), brand association (X3), and brand loyalty (X4), as well as intervening variables, and five endogenous variables: brand equity (Y1), recognition of needs (Y2), information search (Y3), alternative evaluation (Y4), and purchase decision (Y5) (Y5) (Abou-Shouk & Soliman, 2021; Teixeira & Teixeira, 2023). According to the researcher, it displays a complete variable hoping that the handling tips are more comprehensive so that the input for the solution is well. If the variable is invalid, insignificant, and unreliable, the monitor is easy, besides knowing the goodness of fit (Dirsehan & Cankat, 2021).

2. Research Method

We use a quantitative descriptive method. The research was carried out in companies engaged in shipping services, namely the XYZ Corporation represented by the Sidoarjo, Indonesia. The research data was obtained from the distribution of questionnaires in two ways, online and offline. The measurement scale used in this questionnaire is the Likert scale (1-5). Filling out the questionnaire was given to users of the delivery service of XYZ Corporation with a minimum delivery frequency of 1 time, using the maximum likelihood (ML) technique (100-200). The processed input data is 180, so the SEM assumption is fulfilled (Park & Ha, 2021). The Indicator Model is Reflective used in the modelling, and the theory is strong, and the endogenous variables are more than one reason to use the tool Structural Equation Modeling (SEM) (Dash & Paul, 2021). There are two processing processes: measurement and structural models (Sharma et al., 2021; Jamalpour & Yaghoobi-Derab, 2022). The data processing results are tests of validity, significance, regression weight, reliability, and goodness of Fit models. There are four exogenous variables (perceived quality, brand association, brand loyalty, and brand awareness) for the five endogenous variables, brand equity, recognition of needs problems, information search, alternative evaluation, and purchase decision.

3. Results

The measurement model results show that all variables are valid and significant because the goodness of fit and cut-off value is not good. Therefore, it can be ascertained that the structural model results and the results are contained in Table 1.

The measurement model results get the goodness of fit and cut off value values are chi-square = 2301.382; probability level = 0.000; Cmin/df = 4.214; RMSEA = 0.132; GFI = 0.616; AGFI = 0.542; CFI = 0.587; TLI = 0.533. From the model test results compared with the critical value, all of them are not good. While the validity and reliability test shows that all indicators are valid and reliable. The results of the structural model, the results of the goodness of fit and cut off value are chi-square = 2967.199, Probability level = 0.000, Cmin/df = 5.063, RMSEA = 0151, GFI = 0.575, AGFI = 0.517, CFI = 0.435, TLI = 0.393. Compared to the critical value of all indicators from the research model test results, the Goodness of Fit Test is not good yet. However, it is sufficient until the

Table 1:
Value of Goodness of Fit & Cut off Values Measurement Model

Criteria	Model Test Results	Critical Values	Information
X^2 Chi square	2301.382	Small, X^2 with df = 558, α = 0.05	Not Good
Probability	0.000	≥ 0.05	Not Good
CMIN/DF	4.214	≤ 2.00	Not Good
RMSEA	0.132	≤ 0.08	Not Good
GFI	0.616	≥ 0.90	Not Good
AGFI	0.542	≥ 0.90	Not Good
TLI	0.533	≥ 0.95	Not Good
CFI	0.587	≥ 0.95	Not Good

Source: Authors' own research

Structural Model data processing without discussing the modification of the model because the modification of the model is so complicated that the discussion is for the analysis through the indicators and standardised Regression Weight (Ali et al., 2021).

Table 2 and Figure 1 show that the score is not good. However, the relationship between the purchasing decision variables and the service delivery process. Company variable XYZ is significant. The data is processed with a structural model without discussing the model's modification, so an exit analysis through standardised regression weight indicators is carried out. According to the results of hypothesis testing, perceived quality, brand awareness, and brand loyalty all have a positive and significant effect on brand equity. Brand equity has a positive and significant effect on the recognition of needs. Recognition of needs has a positive and significant effect on information search. Information search has a positive and significant effect on alternative evaluation. Finally, alternative evaluation has a positive and significant impact on purchase.

Perceived Quality (X2) is still inferior to new competitors, even though the pioneer perceived quality. Brand Loyalty or Brand Loyalty X4 even though the pioneer Brand Loyalty is still inferior to new competitors. The measurement results of the model are in Table 3, goodness of fit and cut

Table 2:
Estimate Validity, Significance and Estimate Standardized Regression Weight

|		Estimate		SE	CR	2.SE	P	Note. Valid	Note. Significant	Estimate Standardised Regression Weight
								CR>2SE	P≤0.05	
Y1	←	X4	.254	.081	3.125	.162	.002	Valid	Significant	.437
Y1	←	X3	.295	.080	3.680	.160	***	Valid	Significant	.570
Y1	←	X2	.179	.051	3.536	.102	***	Valid	Significant	.399
Y1	←	X1	.324	.109	2.974	.218	.003	Valid	Significant	.484
Y2	←	Y1	.530	.307	4.986	.614	***	Valid	Significant	1.078
Y3	←	Y2	.954	.141	6.757	.282	***	Valid	Significant	.762
Y4	←	Y3	.843	.114	7,413	.228	***	Valid	Significant	.884
Y5	←	Y4	.685	.157	4.372	.314	***	Valid	Significant	.697

Source: Authors' own research
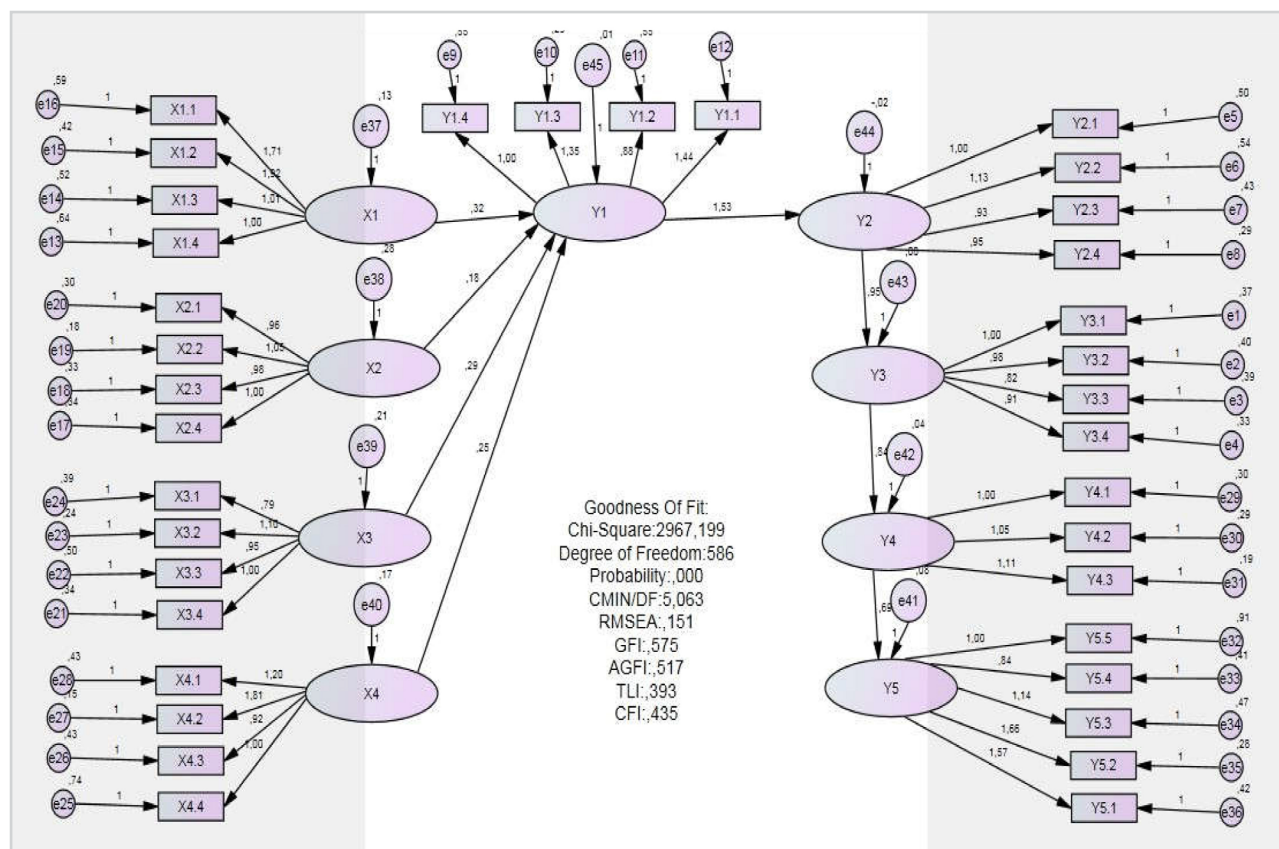
Figure 1:
Structural Model Test Results
Source: Authors' own research

Table 3:
Value of Goodness of Fit and Cut off Value Structural Model

Criteria	Model Test Results	Critical Values	Information
X2 Chi-square	2967.199	Small, X^2 with df = 586, α = 0.05	Not Good
Probability	0.000	≥ 0.05	Not Good
CMIN / DF	5.063	≤ 2.00	Not Good
RMSEA	0.151	≤ 0.08	Not Good
GFI	0.575	≥ 0.90	Not Good
AGFI	0.517	≥ 0.90	Not Good
TLI	0.393	≥ 0.95	Not Good
CFI	0.435	≥ 0.95	Not Good

Source: Authors' own research

off value are chi-square = 2301.382; probability level = 0.000; Cmin/df = 4.214; RMSEA = 0.132; GFI = 0.616; AGFI = 0.542; CFI = 0.587; TLI = 0.533. From the model test results compared with the critical value, all of them are not good. While the validity and reliability test shows that all indicators are valid and reliable. From the structural measurements of Figure 1 model, the results of the goodness of fit and cut off value are Chi-square = 2967.199; Probability level = 0.000; Cmin/df = 5.063; RMSEA = 0.151; GFI = 0.575; AGFI = 0.517; CFI = 0.435; TLI = 0.393. From the model test results, which are compared with the critical value, all indicators are not good.

The resulting model represents the public's view of The XYZ Corporation, considering that the questionnaire can represent Indonesia. From this, it can be concluded that from the existing questionnaires, many people feel that the impression of quality, brand associations, and brand awareness of The XYZ Corporation is still low. The management can use this as input to improve it in the future. By improving matters relating to the three variables that need to be considered above, it is hoped that the brand equity of The XYZ Corporation is also improving and has an impact on increasing its position in the shipping service sector (Harun & Rokonuzzaman, 2021).

According to the results of the processed questionnaire, the Perceived Quality (X2) variable in this study had a significant effect on The XYZ Corporation's brand equity, with a regression value of 0.339. This figure can indicate that the perceived quality level of the delivery service of The XYZ Corporation is still not very good (Dwivedi et al., 2018). This is partly due to competitors in the delivery service sector, such as JNE and J&T. Namely, the level of quality perceived by the community is still not the main choice at this time. In addition, the image of The XYZ Corporation, which is part of the community as a company sending letters and documents and postal goods, also has an influence. However, it is possible that XYZ Corporation can continue to improve its position in the community to be used as an alternative in shipping services (Kim et al., 2021). The XYZ Corporation can position itself as a final purchasing choice by aggressively developing delivery service items and engaging in strategic sponsorships with brands or other third parties that can grow. The XYZ Corporation's delivery service brand, performing benchmarking or comparing its performance to the best competitors (Bae & Zamrudi, 2018; Zhang & Zheng, 2021).

The brand loyalty variable (X4) is the only positive and significant effect on the smallest brand equity (Moreira et al., 2017). From the results of the existing questionnaire, it was found that brand loyalty or brand loyalty has a regression value of 0.437, which can be said that if The XYZ Corporation can use this to increase the strength of its brand to increase sales XYZ Corporation. For quite a long time, the shipping service industry certainly has had many positive values in Indonesian society to survive until now (Fusté-Forné & Filimon, 2021). Services that are considered good should be improved. The company's image must also be maintained so loyal customers can make recommendations to others and the next generation. Some of the respondents who also filled out the questionnaire admitted that they used the delivery service of The XYZ Corporation because of their parents' recommendation, this is strong evidence that The XYZ Corporation is still trusted by many of its loyal customers. In addition, from the start of the respondents, it was found that the age of delivery service users is mainly in the age range of 17-22, which is currently most involved in the field of online business, which is a good target for companies to make them loyal customers. By offering attractive prices and appropriate marketing strategies for young people, and consistent service, young people, can become loyal customers (Bekamiri et al., 2021).

The brand equity variable itself has a positive and significant effect on the variables of purchasing decision process (Teixeira & Teixeira, 2023). The value of each regression of 1.078 can be concluded by improving the brand equity variable. The brand equity value of The XYZ Corporation will improve with strategic steps based on the above explanation. With the increasing significance

value of brand equity from The XYZ Corporation, the effect on the purchase decision process of users of shipping services will also improve (Harun & Rokonuzzaman, 2021). All indicators are valid, significant, and reliable for all exogenous variables. This must be maintained and even increased because of the complexity of the problem. Due to the simultaneous equation, the regression value of the exogenous variable is getting smaller. The intervening and endogenous variables are of convincing significance. XYZ Corporation still exists but cannot or is still far from the market leader even though it is a pioneer.

4. Conclusion

Brand equity is significantly influenced by the relationship model and has a significant effect on need recognition. The search for information has a positive and significant effect on evaluating alternatives. Alternative evaluation has a positive and significant effect on alternative evaluation. This research implies that XYZ Corporation must change the procedures and procedures for better services, at least equivalent to several other services, to become the main focus in delivering service services. This means that the decision to use expedition services is determined by brand loyalty, perceived quality, brand awareness, and brand associations. This research implies that XYZ Corporation should change its service procedures and procedures to be better, at least equivalent to some other services, to become the main focus in providing services.

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