SERVICE QUALITY EVALUATION USING THE INTEGRATION OF SERVQUAL AND KANO MODEL TO QUALITY FUNCTION DEPLOYMENT (QFD) ON PACKAGE DELIVERY COURIER SERVICE

FINAL PROJECT

The Report Submitted as Fulfillment of Requirements for Final Project in Department of Industrial Engineering, Faculty of Engineering, Andalas University
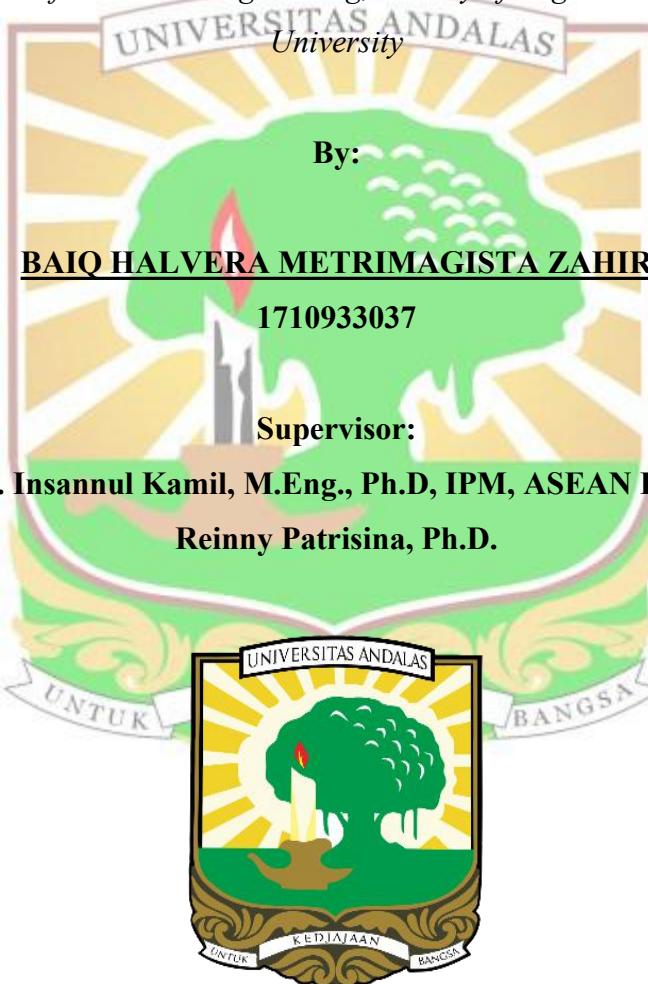
By:

BAIQ HALVERA METRIMAGISTA ZAHIR
1710933037

INDUSTRIAL ENGINEERING DEPARTMENT
FACULTY OF ENGINEERING
ANDALAS UNIVERSITY
2021

SERVICE QUALITY EVALUATION USING THE INTEGRATION OF SERVQUAL AND KANO MODEL TO QUALITY FUNCTION DEPLOYMENT (QFD) ON PACKAGE DELIVERY COURIER SERVICE

FINAL PROJECT

The Report Submitted as Fulfillment of Requirements for Final Project in Department of Industrial Engineering, Faculty of Engineering, Andalas University

By:

BAIQ HALVERA METRIMAGISTA ZAHIR

1710933037

Supervisor:

Ir. Insannul Kamil, M.Eng., Ph.D, IPM, ASEAN Eng.

Reinny Patrisina, Ph.D.

INDUSTRIAL ENGINEERING DEPARTMENT

FACULTY OF ENGINEERING

ANDALAS UNIVERSITY

2021

ABSTRACT

Recently, the logistics business has developed rapidly as result of the developments of technology and digital innovation. This can be seen from the booming logistics businesses phenomenon as a result of the growth of e-business usage in trading transactions. Service quality is essential in the sustainability of the logistics business, companies have to improve and sustain the service quality in order to survive in the market competition. Courier service is categorized in the logistics business category.

This study aims to measure the service quality of package delivery services of two company, to identify the attributes that most influence service quality, and provide recommendations to enhance service quality. The dimensions used in this study using 8 dimensions of Logistic Service Quality developed by Mentzer et al., (2001), namely *Personnel Contact Quality (PQ), Order Release Quantities (OR), Information Quality (IQ), Ordering Procedures (OP), Order Accuracy (OA), Order Condition (OC), Order Discrepancy Handling (OD), dan Timeliness (TI)*. The methods used in determining service quality level are Servqual Method and Kano Model, while the proposed improvements are constructed using Quality Function Deployment (QFD).

Based on servqual method results, it is obtained servqual gap value of company A (-0.052) is more positive compared to company C (-0.580). This value illustrates that customers are more satisfied with the performance of company A than C even though both company have negative servqual gap score. Based on Kano Model categorization it is obtained there are 7 (seven) attribute categorized in attractive category, 12 (twelve) attribute categorized in one-dimensional category, 13 (thirteen) attribute categorized in indifferent category, and 4 (four) attribute categorized in must-be category. Moreover, the attributes that have the greatest influence on customer satisfaction and dissatisfaction are attribute orders received are undamaged (OC1), compensation that is given due to handling error is reasonable (ODH1), the company guarantees the confidentiality and security of shipments or information (OC4). The results of QFD construction for both company obtained that there are 13 designed technical responses to fulfill customer needs. The proposed improvements that have the highest priority for both company (A and C) is periodically monitor or supervise the employee performance criteria and improve the SOP on delivery and service (R3), maximization of employee's capabilities on service handling and customer specific needs through training, seminar, and workshop (R1), providing reward and punishment for employee (R5), and IT system development (R11).

Keywords: Kano Model, Logistic, Quality Function Deployment (QFD), Service Quality, Servqual Method.

ABSTRAK

Bisnis logistik telah menjadi bisnis yang berkembang sangat pesat sebagai akibat dari perkembangan teknologi dan inovasi digital. Hal ini dapat dilihat dari banyaknya bisnis logistik yang muncul sebagai akibat dari perkembangan e-business dalam transaksi jual-beli. Kualitas pelayanan merupakan hal yang sangat penting dalam keberlangsungan bisnis logistik. Perusahaan bersaing untuk meningkatkan kualitas pelayanan agar dapat bertahan dan tumbuh dalam persaingan pasar yang semakin kompetitif. Jasa kurir merupakan bisnis yang termasuk dalam kategori bisnis logistik.

Penelitian yang dilakukan bertujuan untuk mengukur kualitas pelayanan jasa pengiriman paket oleh dua perusahaan jasa kurir, mengidentifikasi atribut yang paling berpengaruh terhadap kualitas pelayanan, dan memberikan rekomendasi perbaikan untuk peningkatan kualitas pelayanan. Dimensi yang digunakan dalam penelitian ini adalah 8 dimensi Logistic Service Quality yang dikembangkan oleh Mentzer dkk., (2001) yang meliputi Personnel Contact Quality (PQ), Order Release Quantities (OR), Information Quality (IQ), Ordering Procedures (OP), Order Accuracy (OA), Order Condition (OC), Order Discrepancy Handling (OD), dan Timeliness (TI). Metode yang digunakan dalam penentuan tingkat kepuasan pelanggan adalah Servqual dan Model Kano, sedangkan untuk perbaikan kualitas layanan menggunakan metode Quality Function Deployment (QFD).

Dari hasil penelitian yang dilakukan menggunakan metode servqual, diperoleh nilai gap servqual kedua perusahaan (A dan C). Nilai tunggal servqual gap pada perusahaan A (-0.052) bernilai lebih positif dibandingkan perusahaan C (-0.580), yang artinya bahwa pelanggan lebih merasa puas dengan kualitas pelayanan perusahaan A dibandingkan dengan perusahaan C. Sedangkan berdasarkan kategorisasi Kano Model berhasil didapatkan 7 (tujuh) atribut pada kategori attractive, 12 (dua belas) atribut pada kategori one-dimensional, 13 (tiga belas) atribut pada kategori indifferent, dan 4 (empat) atribut pada kategori must-be. Atribut yang memiliki pengaruh paling besar terhadap customer satisfaction dan dissatisfaction adalah atribut tidak terdapat cacat pada barang yang diterima (OC1), kompensasi yang diberikan akibat kesalahan perusahaan cukup layak (ODH1), perusahaan menjamin kerahasiaan dan keamanan pengiriman serta informasi (OC4). Hasil dari QFD untuk kedua perusahaan A dan C didapatkan 13 (tiga belas) rancangan respon teknis. Solusi perbaikan yang memiliki prioritas tertinggi untuk diterapkan secara berurutan adalah melakukan monitoring secara berkala (R3), mengadakan training secara berkala (R1), memberlakukan reward and punishment system (R5), dan pengembangan sistem IT (R11).

Kata Kunci: Kualitas Layanan, Logistik, Metode Servqual, Model Kano, Quality Function Deployment (QFD).