

## ABSTRAK

Persaingan bisnis di industri *Testing, Inspection, and Certification* (TIC) menuntut perusahaan untuk mampu mempertahankan dan meningkatkan loyalitas pelanggan sebagai keunggulan bersaing yang berkelanjutan. Penelitian ini bertujuan untuk menganalisis pengaruh kualitas layanan (SQ), citra merek (BI), dan kepuasan pelanggan (CS) terhadap loyalitas pelanggan (CL) di PT UTX, serta mengidentifikasi segmentasi pelanggan berdasarkan perilaku dan firmografis menggunakan pendekatan *Recency, Frequency, Monetary, Diversity* (RFMD) dan sektor usaha. Metode yang digunakan adalah pendekatan kuantitatif. Analisis *Structural Equation Modeling* (SEM) berbasis *Partial Least Squares* (PLS) digunakan untuk menguji hubungan antar variabel determinan loyalitas pelanggan dari data Survei Kepuasan Pelanggan PT UTX Tahun 2024, sedangkan segmentasi dilakukan menggunakan metode *graph embedding* dan *hierarchical clustering* terhadap 204 pelanggan *key account*. Hasil penelitian menunjukkan bahwa kualitas layanan, citra merek dan kepuasan pelanggan berpengaruh positif dan signifikan terhadap loyalitas pelanggan. Selain itu, citra merek dan kepuasan pelanggan juga berperan sebagai mediator parsial dalam hubungan antara kualitas layanan dan loyalitas pelanggan. Segmentasi RFMD menghasilkan enam kluster pelanggan dengan karakteristik yang berbeda, yaitu (1) *Diversified High-Activity Champions*, (2) *High-Value Cross-Sector Players*, (3) *Oil & Gas Specialists*, (4) *Coal Mining Spectrum*, (5) *Low-Value Mixed-Sectors*, dan (6) *Mineral Mining Specialists*. Temuan ini memberikan implikasi strategis bagi PT UTX untuk merancang strategi pengelolaan pelanggan yang disesuaikan dengan karakteristik tiap segmen, meningkatkan dimensi kualitas layanan dan citra merek yang dinilai penting namun masih rendah, serta mengoptimalkan potensi *cross-selling* dan *up-selling* pada segmen bernilai tinggi (1 dan 2).

**Kata kunci:** loyalitas pelanggan, kualitas layanan, citra merek, kepuasan pelanggan, RFMD, sektor usaha, segmentasi pelanggan

## ABSTRACT

*Business competition in the Testing, Inspection, and Certification (TIC) industry necessitates that companies maintain and enhance customer loyalty as a sustainable competitive advantage. This research aims to analyse the influence of service quality (SQ), brand image (BI), and customer satisfaction (CS) on customer loyalty (CL) at PT UTX, as well as identify customer segmentation based on behaviour and firmographics using the Recency, Frequency, Monetary, Diversity (RFMD) approach and business sectors. The method used is a quantitative approach. Structural Equation Modelling (SEM) analysis based on Partial Least Squares (PLS) is used to examine relationships between customer loyalty determinant variables from PT UTX Customer Satisfaction Survey data for 2024, while segmentation is conducted using graph embedding and hierarchical clustering methods on 204 key account customers. Research results show that service quality, brand image, and customer satisfaction have positive and significant effects on customer loyalty. Additionally, brand image and customer satisfaction also serve as partial mediators in the relationship between service quality and customer loyalty. RFMD segmentation produces six customer clusters with different characteristics: (1) Diversified High-Activity Champions, (2) High-Value Cross-Sector Players, (3) Oil & Gas Specialists, (4) Coal Mining Spectrum, (5) Low-Value Mixed Sectors, and (6) Mineral Mining Specialists. These findings provide strategic implications for PT UTX to design customer management strategies tailored to each segment's characteristics, improve service quality and brand image dimensions that are considered essential but still low, and optimise cross-selling and up-selling potential in high-value segments (1 and 2).*

**Keywords:** *customer loyalty, service quality, brand image, customer satisfaction, RFMD, business sector, customer segmentation.*