

ABSTRACT

The shipbuilding industry in Batam has a strategic position in supporting the growth of the national maritime economy. PT Biro Klasifikasi Indonesia (BKI) Batam Branch acts as a national classification society responsible for the supervision and certification of new vessels. However, the supervision process still faces significant obstacles such as the limited number of surveyors, uneven workload distribution, and low work area efficiency, which has an impact on service delays. In competition with international classification societies, service quality and innovation are key factors to maintain the loyalty of shipyards as service users.

This study aims to examine the effect of service quality, work area efficiency, and service innovation on service user loyalty, by placing shipyard satisfaction as a mediating variable. This research also explores service improvement priorities through the Importance-Performance Map Analysis (IPMA) approach as a complement to structural analysis.

The study used a quantitative approach with the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. Data were obtained through distributing questionnaires to 129 respondents from various shipyards in Batam. The analysis was conducted using SmartPLS 4.1, with outer and inner model evaluation and mediation testing. IPMA was used to identify service indicators that have high importance but low performance.

The results showed that service quality, work area efficiency, and service innovation have a positive and significant influence on shipyard satisfaction, and that satisfaction significantly mediates the influence of the three on service user loyalty. IPMA revealed that indicators of work area efficiency and surveyor responsiveness have a high level of importance to loyalty, but their performance is still not optimal.

This research provides a practical contribution in the form of recommendations for improving services through clustering work areas and digitizing the supervisory system. Theoretically, this research opens space for model development through the addition of moderating variables and the CB-SEM-based Confirmatory Factor Analysis approach.

Keywords: IPMA, Service Innovation, Service User Loyalty, Service Quality, Shipyard Satisfaction, SmartPLS, Work Area Efficiency