

ABSTRAK

Fenomena dalam penelitian ini menganalisis dan membandingkan efisiensi waktu pelayanan antara sistem *non self service* dan sistem *self-service* pada Stasiun Pengisian Bahan Bakar Umum (SPBU) Dago Kota Bandung. Latar belakang penelitian ini didasari oleh kebutuhan akan pelayanan publik yang lebih cepat, efisien, dan adaptif terhadap perkembangan teknologi. Metode yang digunakan dalam penelitian ini adalah pendekatan kuantitatif dengan model antrian M/M/s, dan analisis dilakukan menggunakan perangkat lunak *QM for Windows*. Data dikumpulkan melalui observasi langsung terhadap dua sistem pelayanan, yang masing-masing diuji pada berbagai shift operasional (pagi, siang, sore). Hasil simulasi menunjukkan bahwa sistem *self-service* memiliki kinerja yang lebih efisien dibandingkan sistem *non self service*.

Kata kunci: *self service*, *non self service*, efisiensi waktu pelayanan, model antrian.

ABSTRACT

The phenomenon in this study analyzes and compares the efficiency of service time between non-self-service systems and self-service systems at the Dago Public Fuel Filling Station (SPBU) in Bandung City. The background of this study is based on the need for faster, more efficient, and more adaptive public services to technological developments. The method used in this study is a quantitative approach with the M/M/s queue model, and the analysis was carried out using QM for Windows software. Data were collected through direct observation of two service systems, each of which was tested on various operational shifts (morning, afternoon, evening). The simulation results show that the self-service system has a more efficient performance than the non-self-service system.

Keywords: self-service, non self service, service time efficiency, queuing mode