ABSTRACT

Auto 2000 Way Halim is part of the official Toyota dealer network in Indonesia that provides new car sales, as well as maintenance and repair services for vehicles in the Lampung region. A common issue faced by Auto 2000 Way Halim is estimating customer wait times; for instance, minor issues like oil changes are handled swiftly and efficiently by technicians, ensuring customers can quickly return to their vehicles. However, for more significant problems such as engine malfunctions, repairs require a longer duration. This process involves in-depth analysis and may necessitate ordering rare spare parts. In cases like these, precision is essential, leading to longer repair times before the vehicle can be restored to optimal condition. If the vehicle service queue arrangement is still manual, issues that arise are highly susceptible to human errors, such as scheduling mistakes and inaccuracies in wait time estimates. Furthermore, an inefficient queue system can result in extended customer wait times, reduced service productivity, customer imbalances, and dissatisfaction. Therefore, a web-based queue information system needs to be developed.

The queue system built employs the Single Channel Single Phase (SCSP) model, development methods using Extreme Programming, and design models like use case diagrams and activity diagrams to illustrate the queue information system. The research findings indicate that the implementation of the SCSP model reduces customer wait times, minimizes queue discomfort, and assists Auto 2000 Way Halim management in planning resources more efficiently. The implementation of this system can enhance customer satisfaction and workshop productivity, with the potential for application in various queue services in the motor vehicle service industry, thus reducing errors in record-keeping. Additionally, the system aids in queue/reservation reports and vehicle service details, making them faster and more accurate.

Keywords: Queue, Information System, Single Channel Single Phase, Website.