

ABSTRACT

The On Board Diagnostic-II (OBD-II) system provides facilities to users while driving to be able to access the status of the vehicle as well as GPS which is useful for knowing the whereabouts of the vehicle. Public vehicles (transportation, damri etc.) are currently declining due to disruption by online vehicles. The reason is that users do not have the tools to obtain definite information to use public vehicles that online vehicles already have, where there are still many irresponsible drivers.

Therefore, from the above problems, a platform is needed that can digitize public vehicles. Which is to increase the safety, comfort and safety of these vehicle users and increase the ease of using public transportation. Basically, GPS on online vehicles is only available on each driver's phone where there are still many irresponsible drivers. On the other hand, online vehicles as transportation on the road do not have clear regulations, because they are not listed in Law No. 22 of 2009 concerning special road transportation. Where public vehicles have regulations Law no. 22 of 2009 Chapter XI Security and safety of traffic and road transportation, namely 201 (2): Public Motorized Vehicles must be equipped with information-giving devices to facilitate the detection of crimes in Motorized Vehicles. Therefore, it is necessary to have a device that has a GPS in the vehicle to digitize public vehicles, so that public vehicles can be monitored by the government.

This system has a hypothesis for the digitalization of public vehicles in Indonesia, which can give life back to public vehicles that are disrupted by online vehicles so that public vehicles can be monitored by the government so that people can trust more. This system has been tested and obtained the following results, with the response time speed parameter on the OBD-II Gosuncn device which is 00:52 seconds, the accuracy of the GPS position on a stationary car has an average of 1.3 m and 1.8 standard errors, when the car is moving it has an average of 3.3 m and 2.01 standard errors. *Usability Test (UT)* testing of this application gets the result that the application is easy to use and users recommend this application because in *Net Promoter Score (NPS)* the value is 100% which means that no user gives a value below 7.

Keywords: *OBD-II, ECU, GPS, NPS, UT*