

## ABSTRACT

The problems faced by the community in terms of using and paying water bills are things that have happened to this day. Based on Open Data provided by PUPR, there are 1,485,621 water users spread throughout the region. This number continues to grow today, in line with the large number of water users in Indonesia. The large number of water users causes problems when monitoring water use which needs to be checked manually, besides that the records of water use by users sometimes do not match the actual amount of water used, causing problems during the payment process. These problems need to be solved using a system that can provide accurate water use data and the process of converting water use into water prices that can be seen directly without the need to check the meter needle attached to the water pipe. Based on these problems and solutions, the smart dashboard is the optimal solution and is able to perform data computing and other features that can support all needs and as a solution to the problems faced today. The process of creating a web service from a smart dashboard is carried out using Node.js and PostgreSQL as databases. The system development process is carried out using an iterative incremental method that has the ability to add features through each existing iteration. After the development process is complete, testing shows that the process of sending water use data and converting water prices is successful, and the integration process with the front end through the endpoint can be carried out.

Kata Kunci : *smart dashboard, back end, IoT, Antares, payment, PostgreSQL, iterative incremental, endpoint, webservice, Node.JS.*