

ABSTRACT

Indonesia, the fourth most populous country in the world, faces major challenges in water management. Regional Drinking Water Companies (PDAMs) as the main providers of clean water services still use manual systems in recording water usage, which are prone to errors and inefficiencies. This research aims to develop an Android-based mobile application to support the Prepaid Water Meter (PWM) system that is expected to overcome the water management problems that occur in Indonesia. The application development was conducted using the iterative incremental method, which allows the project to be broken down into small iterations that include planning, analysis & design, implementation, and testing. This application is designed to support token purchase, token delivery to PWM, and monitoring of water usage via mobile phone. The back-end of the application was developed using JavaScript and PHP with React Native and Laravel frameworks. The results show that the iterative incremental development method is effective in meeting the needs of the system in stages.

*Keywords— **Prepaid Water Meter, Mobile Application, Back-end, React Native, Iterative Incremental.***