ABSTRACT

Electricity is one of the most crucial things in our routines. Almost all of our device depends on it as the power source. Therefore a monitoring tool is required due to increased electrical uses that affect the cost. For a postpaid consumer, these usage costs will be notified only at the end of the month, and the prepaid will only know when the token is expired. These circumstances often led people to wonder what has increased their electrical costs. This increased const sometimes led by people who may be unaware of their high uses of electricity or even the use of devices with leakage current. This problem concludes the need for tools or software which can monitor every interconnected electrical component in real-time and send the information back to the user using wireless. This system is part of the Smart Metering project, which integrates analog components with Arduino Uno as a microcontroller and mobile device as monitoring tools. Based on the survey, over 80.38% of the respondents support the development of Smart Metering IoT and Mobile apps.

Keywords: Electrical Current, Electrical Power, Transformator, Arduino Uno