# *DESIGN AND BUILD RICE ATM PROTOTYPES FOR COMMUNITIES AFFECTED BY THE COVID-19 PANDEMIC USING INTERNET OF THINGS (IOT) TECHNOLOGY*

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## *ABSTRACT*

*During the Covid-19 pandemic, there have been many significant changes in several sectors. The problem of food availability to the increase in the price of basic commodities occurred in various regions, as a result of the implementation of the Covid-19 handling policy, which was the application of physical distancing to Large-Scale Social Restrictions (PSBB) which affected economic activity in Indonesia. The government issued a policy in the form of assistance in the form of rice. However, in the process of distributing social assistance, there are various problems, such as the amount of rice given does not match the data, the distribution of basic necessities in the form of rice is uneven, people who are not listed in the list of people who are entitled to assistance, but receive assistance. Therefore, we need a practical and easy tool that can be used at any time to minimize the crowded queues of recipients of rice aid which can cause the transmission of Covid-19, which is caused by physical contact of the community when queuing. So a prototype tool in the form of a Rice ATM was designed using Internet of Things (IoT) technology that can be monitored on a web server. Based on the RFID and Fingerprint sensor tests that have been carried out, 100% success was obtained in reading and comparing the inputted data with data in the MySQL database, as well as distinguishing between registered and unregistered cards, and the results of the tests carried out obtained accuracy and precision values. from the Load Cell sensor readings, which are 99.07% and 98.85%.*

***Keywords**: Rice ATM, RFID, Load Cell, Fingerprint, Internet of Things*