ABSTRACT

The recent development of tofu consumption, shows an increasing consumption of tofu, which in turn has increased the demand for tofu. However, the production figures for tofu which are home-based has not fulfilled the demand. It pushes the industrial sector to develop products with high quality to support its progress. Therefore, the industrial sector must have increased efficiency and effectiveness to increase production yeilds. In order to increase production yields, the role of machine based automation machines is required within the production line. It is estimated that the adaptation of modern technology will be able to meet the production and demand gap. In addition, the hygienic factor, with minimal human touch, & can provide added hygienic value for tofu products.

In this final project, a prototype of automatic tofu cutting machine based on IoT (Internet of Things) is designed to be accessed on a web server through Wi-Fi link and manageb by Esp32cam microcontroller. It is intended so that the quality and production process can be controlled without direct human contact. Thus the production results can be monitored directly by the business owner without going directly to the production floor.

The result of this final project is a prototype of an automatic tofu cutting machine that monitors the results of tofu cutting. This automatic tofu cutting machine works well and fast, with an average speed of 26,983 seconds. With an interface that can display the number of pieces continuously and images of the cut out of tofu. From the research results, it is hoped that this automatic tofu cutting machine can help in increasing small scale tofu production to get more effective results.

Keywords : *Cutting Machine**,**Prototype**,**IoT,Webserver,Wi-Fi,Esp32cam*