## ABSTRACT

## DESIGN AND DEVELOPMENT OF IOT-BASED DATA CENTER SENSOR COOLING SYSTEM PROTOTYPE IN PT CYBERTECHTONIC PRATAMA

By

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The data center is a place for data processing, telecommunications services, network services and other information technology infrastructure. The impact of temperature intolerance, damage to devices in the server room that comes from room temperature that is too hot or cold can be caused by the air conditioner being off without being noticed by the server room operator. In monitoring the temperature and humidity of the server room cannot be done directly and accurately in all conditions caused by several inhibiting factors in obtaining temperature and humidity information. At PT Cybertechtonic Pratama is a company engaged in information and technology that focuses on data center services. However, this company has not implemented a cooling system sensor to measure temperature and humidity in the server room. Based on the condition of the problem, a prototype cooling system sensor was designed at PT Cybertechtonic Pratama which has the ability or feature to monitor temperature and humidity data information. In designing and developing this prototype using the PPDIOO Life-Cycle Approach as a research method. In designing this prototype using an application called Blynk. The Blynk application can be used to monitor temperature and humidity in the server room and has a warning feature in the form of notifications.

*Keywords*: Data center, sensor cooling system, Blynk, PPDIO Life-Cycle Approach.