## ABSTRACT

## CLOUD SYSTEM DESIGN WITH VPS SERVER INTEGRATION FOR SMALL AND MEDIUM MICRO BUSINESSES (MSME) WITH METHOD SOFTWARE DEVELOPMENT LIFECYLE(SDLC)

by ZAYED IFFAT MAHDI SID : 1202162356

In the midst of post-pandemic conditions and Society 5.0, an integrated intelligent system has become an invaluable asset that is used to increase the competitive advantage of companies, especially SMEs. Along with the era of disruption that destroys the market and demand in the business ecosystem, the need for information technology for long-term assets becomes an important thing that must be met by companies. One of the uses of technology in meeting business needs is the implementation of cloud computing and containers which are applied to various types of programming languages in integrating server development and company support applications. The purpose of this research is to design a virtual private server that is used to assist MSMEs in storing data and improving performance, as well as a Laravel application-based information system that is integrated with Pentaho with three containers, namely Laravel Project App, Mysql, and PHP MyAdmin as an exclusive VPS. , using Amazon Web Service (AWS) EC2 platform services and proving that using Docker technology as a Cloud-based container can save resources when compared to other virtualization technologies.

*Keywords:* Cloud Management, Cloud Computing, small corporate and medium corporate, ec2 server, Docker