ABSTRACT

MSMEs or micro, small, medium businesses are productive businesses owned by individuals and business entities that have met the criteria. MSMEs consist of various types of businesses such as Internet technology, electronics and gadgets, and education.

At present many MSMEs are experiencing limited resources such as hardware in the development of increasingly sophisticated information technology, the need for computer hardware to build various systems increases, especially data storage devices, which in the construction process requires a lot of costs. Under these conditions, we need a technology that makes it easy and can reduce costs on the resources needed. This technology is in the form of Open Source, which is a Private Cloud Computing infrastructure design application using the SDLC (System Development Life Cycle) method with the waterfall model. The purpose of the application of this private cloud computing infrastructure design application is to help increase the productivity of companies and organizations by reducing the cost of using computer hardware at MSMEs.

The result of this study is the proposed application of Private Cloud Computing along with the design of private cloud infrastructure at MSMEs that can be accessed through the dashboard.

Keywords: *Cloud Computing, Private Cloud, Waterfall* SDLC