## **ABSTRACT**

## ANALYSIS AND DESIGN OF WEB HOSTING SERVICE BASED ON DOCKER IN MULTIPURPOSE COOPERATIVE WEB SALES USING CLOUD ADOPTION LIFECYCLE MODEL

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The development of world technology is currently entering the industrial revolution of the 4.0 era which is also called smart factory. The 18th century was a new chapter for the beginnings of change, so quickly that it affected the order of the social, cultural, and economic dimensions of people around the world. The digitalization of all sectors of life virtually creates a copy of the physical world, where the industry continues to process more data to be presented. The world economic order, from the capitalist economic system to the populist economic system, is very dependent on technological developments, especially Information Technology (IT). The populist economic system in Indonesia is realized by the development of Cooperative as economic organizations, a pillar of the national economy, having an important role in Indonesia's economic growth. Following the development of information technology, Cooperative must contribute to its use of information technology. One of the Cooperative that can implement IT developments into the processes that run therein is the multipurpose cooperative. At multipurpose cooperative, one of the IT applications that can be applied is Cloud Computing-based IT in the form of web hosting. With the design of web hosting services at multipurpose cooperative, multipurpose cooperative will benefit in terms of marketing goods. Having a website for marketing goods sold will bring more people who are interested in goods sold at multipurpose cooperative and can boost the economy at multipurpose cooperative. Web hosting that will be applied can be more profitable by using a Docker-based platform. The choice of using Docker can be seen from its safety factor, because with container technology, each container is isolated with other containers. If there is a hacker who managed to penetrate one container, it will not affect other containers. But Docker requires a platform to configure it, so the choice is a Virtual Private Server (VPS), because it can configure server service services according to the requirements needed. To support this research, the cloud adoption lifecycle model is used in its development, cloud adoption lifecycle model is steps that help align technology and business with organizations. With complementary configurations in designing Cloud Computing in the form of web hosting with a Docker-based platform it can be of good use, for the Koperasi that implement it.

Keywords— Koperasi serba usaha, Cloud Computing, PaaS, VPS, Docker, Waterfall