ABSTRACT

Based on the internet needs that are currently increasingly high, we need a

qualified wireless network condition. Wireless network area coverage, which

includes Wireless Local Area Network (WLAN). Wireless is a network that can

exchange data without using cables but uses radio waves. In the development of a

wireless network needed a capable infrastructure, namely devices that are able to

manage and support the wireless network. The wireless network device used must

be able to keep up with technological developments in accordance with its time, for

the time being future technologies such as Wi-Fi 6 and 5G networks.

This research was made using the PPDIOO Life-Cyle Approach method in

three initial stages, namely prepare, plan, and design. This methodology is suitable

for network infrastructure optimization where in the design phase an analysis will

be made to compare features, as well as other specifications on each of these

devices. This comparison is done in order to know that the devices currently in use,

whether they can survive in the long run, and are also capable of following

technological developments, or should be improved for these devices.

The final result of this research is to produce recommendations for wireless

network devices that can support wireless networks in accordance with the capacity

needed and can follow the development of Wi-Fi 6 and 5G technology.

Keywords: networks, wireless, network devices, PPDIOO

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