ABSTRACT

The problem of bandwidth shortages at the Grand Hotel Preanger requires a comprehensive solution to meet customer needs and improve service quality. One approach that can be taken is to develop an open source solution to improve connectivity in the hotel. The development of this open source software to manage and unify bandwidth usage will allow for effective allocation of network resources.

The implementation of this open source solution is expected to produce a platform that will ultimately help the Grand Hotel Preanger in managing network resources. This platform is designed in such a way that it can be used to connect bandwidth usage in real-time, prioritizing applications or interactive signal services that are important to hotel staff. Thus, this open source solution is expected to improve customer experience, optimize network management, and make a positive contribution to the hospitality industry as a whole.

The results of the study showed that this system is able to provide monitoring of wi-fi performance with real-time access via the website. Quantitative data shows the level of success in connecting network connectivity, data transfer speed, and signal stability that is in accordance with WiFi network standards, as well as the results of network quality analysis on the website that was created. In conclusion, this website has succeeded in combining WiFi performance in a hotel environment.

Keyword : Bandwidth, open source, Grand Hotel Preanger