ABSTRACT

PT Neural Technologies Indonesia provides optimal solutions for various industries, including telecommunications, healthcare, and mining. They offer comprehensive business services, including IT Solutions, Digital Transformation, Continuous Transformation, JustClick ERP, Business Intelligence, and Power Supply. As companies or institutions using computer networks grow, the complexity of their network systems also increases. Effective server performance management and monitoring are essential to ensure services remain reliable and efficient. The goal of designing and developing a monitoring dashboard is to create a system that aligns with the agreed-upon features using relevant software and to simulate the design and implementation of a server resource monitoring dashboard using the Bootstrap and Django frameworks as the system's core tools.

The server resource monitoring website is designed based on various tools, such as InfluxDB, Proxmox, Python, Telegraf, and other supporting tools. The website is developed through three main processes: data processing, dashboard visualization, user access management, and alerting. The methods used in the system design include research, analysis, design, installation, configuration, implementation, monitoring, and management. The server resource monitoring website has four main components: CPU usage, memory usage, disk read, and disk write. These components are collected as metrics by the collector, InfluxDB, for visualization purposes..

The design results in the visualization of metrics into interactive graph features and monitoring tables, making it easier for users to identify anomalies in server resources. The main features of the graph visualization include CPU summary utilization, top standing usage, server resources trend, and a heat table. The top standing and heat table graphs include thresholds indicating server conditions: critical (CPU and memory usage above 80%), warning (resource usage above 70%), and safe (resource usage below 70%). The discussion also covers resource server usage trends over specific periods to analyze anomalies in server resources. This system is expected to optimize IT resource management for PT Neural Technologies Indonesia by providing an effective tool to monitor and maintain server performance. Thus, the company can ensure that the services provided to users remain optimal and free from disruptions..

Keywords: *real-time, monitoring, resource server.*