

ABSTRACT

In the growing digital era, the need for accurate and easily understandable data is essential for supporting strategic decision-making. This project focuses on the application of data engineering in developing interactive dashboards using Looker Studio and Apache Superset at PT Padepokan Tujuh Sembilan. The objective is to manage and present real-time company performance data in an intuitive visual format to support OKR (Objective and Key Results) planning and evaluation. The methodology includes a data engineering approach through the ETL (Extract, Transform, Load) process and a prototyping method for dashboard development. Data is collected from various internal company sources, then cleaned, transformed, and loaded into interactive dashboards built with Looker Studio and Apache Superset. The final output, a set of analytical dashboards, demonstrates the system's capability to present real-time and interactive data, simplifying performance monitoring and decision-making. Based on usability testing involving 28 users, the dashboard achieved an average score above 88% across four key aspects, Satisfaction, Usability, Effectiveness, and Usefulness. These results indicate that the integration of data engineering and interactive visualization effectively enhances data management efficiency and delivers tangible value in supporting data-driven decisions within the corporate environment that the system has successfully accelerated the monitoring process, facilitated access to information, and provided added value in supporting the company's strategic decisions.

Keywords: Data engineering, Dashboard, ETL, Looker Studio, Apache Superset, OKR