ABSTRACT

In today's development, the industrial revolution era has entered 4.0, where technological developments have been implemented in various ways to boost the quality of the industry better. There is no education industry that also requires the role of technology to advance the quality of education both in terms of students, lecturers, and other entities that play a role in it. Telkom University is one of the many institutions that take shelter in the Education industry. The 'smart campus' business has been empowered in it, but the use of technology or information systems has not fully covered all existing systems, such as the employee performance level management system or what is commonly called performance management.

Performance management is a system that aims to manage the level of performance of existing employees based on predetermined measurement metrics. There are several methods to implement this, including the assessment to be used, such as the balanced scorecard, 360-degree feedback, and so on. Regardless of the assessment method used, performance management must provide the data needed to produce accurate information and assist management in making decisions.

An information system-based product is needed that can be applied to a framework first before being implemented as a whole into the Telkom University system. [Industrial Engineering is the first choice of object for implementing this performance management system. The making of this project will use the balanced scorecard assessment method that focuses on four perspectives, namely the financial business perspective, the consumer perspective, the process perspective, and the learning growth perspective. Key performance indicators will also be determined based on the goals or objectives of Telkom University as the parent of the Industrial Engineering Faculty.

This application system performance management will become an application so that website-based products can be used quickly, optimally, and efficiently. The development of this application or project will use the scrum

development method so that the project is controlled clearly and maximally. The technology that will be used is also adjusted to the needs of users and current website development technology trends. The performance management of the application to be built uses the React JS library as the front-end and Node.JS for the back-end.

The necessary data collection will be collected using qualitative methods by means of interviews with users directly, observation of the object of research, and triangulation. From the data that has been obtained, an analysis will be carried out that produces outputs such as user requirements, unified modeling language (UML) diagrams, and blueprints for designing user interfaces and user experiences that are tailored to user needs.

The design will be used as a guide in the performance management application development stage. Applications will be published or deployed into hosting provided by the Industrial Engineering Faculty to reduce server rental costs. When the performance management application has been created, a testing phase will be carried out to review the advantages and disadvantages of the application. Tests will be carried out based on black-box testing to measure how much satisfaction the user has with the use of the application. It will be known how much performance management applications can answer questions about performance management at the Faculty of Industrial Engineering.

From these results, it will be known how high the level of fulfillment of the initial objectives set out in the vision and mission of Telkom University is towards what has been achieved by the Industrial Engineering Faculty based on the four main perspectives in the balanced scorecard. The final results can be seen regarding what factors have the most influence on the fulfillment of goals, goals that have been achieved or not, and employees or groups that make the greatest contribution to achieving the existing goals.

Keywords— ***performance management, information system, balanced scorecard, scrum methodology, industrial engineering.***