

INTISARI

Transformasi digital institusi pendidikan tinggi yang didorong oleh Revolusi Industri 4.0 dan semakin dipercepat oleh pandemi COVID-19 telah menekankan pentingnya sistem informasi dalam pengambilan keputusan kritis. Penelitian ini mengeksplorasi desain dan implementasi sistem *dashboard* untuk memantau *Key Performance Indicator* (KPI) atau Target Capaian Kinerja (TCK) di institusi perguruan tinggi yang terdigitalisasi, dengan fokus pada studi kasus Fakultas Teknik Universitas Gadjah Mada. Menggunakan metodologi *Dashboard Design Process*, penelitian ini menampilkan proses pengembangan sistem *dashboard*. Metodologi ini memiliki beberapa tahapan, yaitu *define*, *prototype*, *build*, and *deploy*. Dilakukan juga pengujian sistem *dashboard* menggunakan 3 metode, yaitu pengujian *Black Box*, *Usability Test*, dan *User Experience Questionnaire (UEQ)*. Sistem *dashboard* yang diimplementasikan menawarkan visualisasi komprehensif dari data TCK serta wawasan tentang kinerja di berbagai 3 tingkat, yaitu fakultas, bidang, dan departemen. Hasil pengujian juga membuktikan bahwa sistem *dashboard* yang dikembangkan memiliki tingkat fungsionalitas 100% dan tingkat kebergunaan yang baik dengan nilai *time-based efficiency* 0,103 goals/s; *overall relative efficiency* 77,1%; *completion rate* 90,1%; dan *error rate* 9.9%; serta nilai 1,35; 1,31; 1,48; 1,21; 1,40; dan 1,23 pada skala daya tarik, kejelasan, efisiensi, ketepatan, stimulasi, dan kebaruan.

Kata kunci : Target Capaian Kinerja (TCK), Visualisasi Data, Sistem *Dashboard*, Institusi Perguruan Tinggi

ABSTRACT

The digital transformation of higher education institutions (HEIs) that is driven by the Industrial Revolution 4.0 and further accelerated by the COVID-19 pandemic has emphasized the importance of the information system in critical decision making. This study explores the design and implementation of a dashboard system for monitoring Key Performance Indicators (KPIs) in digitalized HEIs, focusing on an Indonesian university faculty case study that is Faculty of Engineering Universitas Gadjah Mada. Using the Dashboard Design Process methodology, this study details the stages of defining user requirements, prototyping, building, and deploying a user-focused dashboard. This study also explore the testing of the dashboard developed using Black Box Test, Usability Test, and User Experience Questionnaire (UEQ). The implemented dashboard offers comprehensive visualization of the KPIs data as well as insights into performance at 3 levels, which are faculty, field, and department. The result of the testing shows this dashboard have 100% functionality and a good usability score with 0.103 goals/s in time-based efficiency, 77,1% overall relative efficiency; 90,1% completion rate; and 9,9% error rate; also 1,35; 1,31; 1,48; 1,21; 1,40; and 1,23 in the scale of attractiveness, perspicuity, efficiency, dependability, stimulation, and novelty.

Keywords : Key Performance Indicators, Data Visualization, Dashboard System, Higher Education Institution