

## INTISARI

*Weigh in Motion* merupakan inovasi teknologi alat timbang dalam pelayanan publik era teknologi industri khususnya angkutan barang sebagai uji coba Kementerian Perhubungan. Penyelenggaraan teknologi WIM merupakan upaya mempercepat deteksi kendaraan yang berpotensi melakukan Pelanggaran *Over Dimension Over Loading* (ODOL). Penelitian ini dilakukan untuk mengetahui keefektifitasan penggunaan WIM di UPPKB Kulwaru yang dibandingkan dari kesesuaian spesifikasi teknologi sesuai Permenhub No 18 Tahun 2021 serta kuesioner yang dipadukan dari *Performance, Information & Data, Economics, Control & Security, and Service* (PIECES).

Pengumpulan data dilakukan dengan observasi lapangan dan wawancara untuk mempertimbangkan keefektifitasan pemasangan dan penggunaan WIM. Metode analisis deskriptif menggunakan metode *PIECES Framework* untuk menyimpulkan hipotesis yang dirumuskan terbukti atau tidak dalam efektivitasan penerapan teknologi *Weigh In Motion* (WIM) di UPPKB Kulwaru dari sesi responden.

Hasil evaluasi analisis efektivitas penerapan alat dan sistem WIM di UPPKB Kulwaru dengan metode *PIECES Framework* menunjukkan responden setuju efektif dengan nilai persentase rata-rata 77,4%. Hasil penelitian menunjukkan teknologi WIM mampu memberikan informasi sebagai pencatatan dan pengawasan penimbangan. Namun tidak bisa dipastikan penggunaan teknologi WIM di Kulwaru efektif mencegah angkutan barang ODOL. Karena teknologi WIM belum mampu memberikan penindakan bagi angkutan barang ODOL di jalan sesuai Kebijakan *Zero ODOL 2023*. Perlu rekomendasi alur penimbangan WIM lebih efektif agar kendaraan angkutan barang yang melanggar segera ditindak di UPPKB baik pembongkaran muatan, penundaan keberangkatan, atau pemberian denda. Menerapkan dan mengembangkan teknologi yang bisa memberi surat peringatan dan tilang secara elektronik mampu meningkatkan efektivitasan penerapan teknologi WIM di UPPKB Kulwaru.

Kata Kunci: *Over Dimension Over Loading, Weigh In Motion, PIECES Framework, UPPKB Kulwaru*

## ABSTRACT

*Weigh in Motion is a technological innovation in weighing equipment in public services in the era of industrial technology, especially freight transportation as a trial for the Ministry of Transportation. The implementation of WIM technology is an effort to accelerate the detection of vehicles that have the potential to commit Over Dimension Over Loading (ODOL) violations. This research was conducted to determine the effectiveness of the use of WIM at UPPKB Kulwaru which was compared from the suitability of technology specifications according to Permenhub No. 18 of 2021 and a questionnaire combined from Performance, Information & Data, Economics, Control & Security, and Service (PIECES).*

*Data collection is carried out by observing the field and interviews to consider the effectiveness of WIM installation and use. The descriptive analysis method uses the PIECES Framework method to conclude the hypothesis formulated is proven or not in the effectiveness of the application of Weigh In Motion (WIM) technology at UPPKB Kulwaru from the respondent's survey.*

*The results of the evaluation of the effectiveness analysis of the application of WIM tools and systems at UPPKB Kulwaru with the PIECES Framework method show that respondents agree that it is effective with an average percentage value of 77.4%. The results showed that WIM technology is able to provide information as a recording and monitoring of weighing. However, it cannot be confirmed that the use of WIM technology in Kulwaru is effective in preventing ODOL freight transportation. Because WIM technology has not been able to provide action for ODOL freight transportation on the road according to the Zero ODOL 2023 Policy. It is recommended that the WIM weighing flow be more effective so that violating freight vehicles are immediately dealt with at UPPKB either unloading loads, delaying departure, or imposing penalties. Implementing and developing technology that can provide warning letters and electronic tickets can increase the effectiveness of the application of WIM technology at UPPKB Kulwaru.*

*Keywords: Over Dimension Over Loading, Weigh In Motion, PIECES Framework, UPPKB Kulwaru*