

INTISARI

Kualitas proyek pekerjaan jalan di Provinsi D.I. Yogyakarta dipengaruhi oleh banyak aspek yang diantaranya adalah alat berat dan material konstruksi, dimana keduanya perlu *management* yang memadai. Tujuan penelitian ini ialah mengidentifikasi indikator-indikator yang berpengaruh signifikan dari alat berat dan material serta menganalisis bagaimana hubungan keduanya terhadap capaian mutu pekerjaan jalan.

Penelitian ini dilakukan dengan menganalisis data yang diperoleh dari survei menggunakan *structural equation modeling* (SEM). Sebelum data dianalisis menggunakan SEM, data akan dipetakan menggunakan metode *importance performance analysis* (IPA) sesuai tingkat pengaruhnya. Selanjutnya data yang telah dipetakan akan dianalisa menggunakan SEM untuk mencari indikator yang berpengaruh terhadap alat berat, material, dan capaian mutu, serta menganalisis hubungan ketiganya.

Hasil analisis menunjukkan bahwa alat berat dan material berpengaruh secara positif terhadap capaian mutu. Indikator yang berpengaruh signifikan terhadap alat berat adalah : (i) Kondisi laik pakai; (ii) Intensitas perawatan; dan (iii) Kapasitas alat berat. Indikator yang berpengaruh signifikan terhadap material adalah : (i) Fluktuasi harga di pasaran; (ii) Perubahan spesifikasi material; dan (iii) Ketersediaan material substitusi. Indikator yang berpengaruh signifikan terhadap capaian mutu adalah : (i) Kondisi laik pakai peralatan konstruksi; (ii) Keterampilan operator alat berat; (iii) Produktivitas alat berat; (iv) Kapasitas alat berat; dan (v) Ketepatan mutu material.

Kata kunci : alat berat, material, capaian mutu, indikator, pengaruh

ABSTRACT

Road construction quality in D.I. Yogyakarta Province is affected by many aspect, which among all of them are heavy equipment and construction material, where both needed an adequate management process. The purpose of this research are to identify significantly affecting indicators of heavy construction vehicle and construction material and to analyze how both of it affect road construction quality reach.

This research is done by analyzing the survey data by using structural equation modeling (SEM). Before the data analyzed by SEM, the data will be mapped by using the importane performance analysis (IPA) method according to their affection level. Then data that have been mapped will be analyzed with SEM to look for indicator that affect significantly to heavy duty vehicle, material, and quality reach, and also anylizing how is the relation between the three of them.

The analysis result shows that heavy construction vehicle and construction material affect road construction quality reach positively. Indicators which significantly affect heavy equipment are: (i) Heavy equipment eligibility; (ii) Maintenance intensity; and (iii) Heavy equipment capacity. Indicators which significantly affect material are: (i) Market price fluctuation; (ii)Change in material spesification; and (iii) Subtitute material availability. Indicators which significantly affect road construction quality reach are: (i) Heavy equipment eligibility; (ii) Heavy equipment operator's skill; (iii) Heavy equipment productivity; (iv) Heavy equipment capacity; and (v) Material quality preciseness.

Keywords : heavy duty vehicle, material, quality reach, indicator, affection