

INTISARI

Kegiatan industri manufaktur didorong berada dalam suatu Kawasan Industri (KI). Hingga saat ini kegiatan industri masih terkonsentrasi di Pulau Jawa dengan 58% populasi KI di dalamnya. Hingga kini, rata-rata tingkat okupansi masih di bawah 50% dan belum ditetapkan sebagai target capaian dalam dokumen pembangunan. Target capaian saat ini masih berfokus pada jumlah KI yang dibangun, namun belum memperhatikan tingkat okupansinya. Padahal tingkat okupansi KI menunjukkan tingkat keterisian *tenant* perusahaan industri pada KI yang telah dibangun dan penyerapan pasar atas kavling KI yang tersedia, sehingga dapat menjadi salah satu indikator kesuksesan pengembangan KI di Indonesia. Upaya penilaian kesiapan KI telah dilakukan berdasarkan 11 parameter penilaian. Berdasarkan observasi awal, diduga upaya penilaian kesiapan KI tersebut belum mengakomodasi seluruh *stakeholder* terkait dalam sistem KI di Indonesia, serta belum mempertimbangkan seluruh faktor yang mempengaruhi kesiapan KI. Alat ukur yang ada untuk pengukuran kesiapan KI masih bersifat parsial, karena hanya mengukur kesiapan pada masing-masing faktor. Padahal kesiapan KI merupakan suatu konsep yang kompleks karena melibatkan berbagai faktor dan *stakeholder* terkait sehingga apabila pengukuran dilakukan secara parsial/terpisah pada masing-masing faktor, maka interaksi dan hubungan antar faktor yang mungkin mempengaruhi kesiapan KI secara keseluruhan berpotensi tidak teridentifikasi. Selain itu masih terdapat kelemahan dan keterbatasan pada penelitian yang ada, baik dari sisi metode penelitian yang digunakan maupun ruang lingkup pengukuran kesiapannya. Untuk itu diperlukan pengembangan alat ukur baru untuk mengukur kesiapan KI di Indonesia secara komprehensif berupa indeks kesiapan KI (*Industrial Estate Readiness Index*/IERI) dengan melibatkan *stakeholder* terkait dalam sistem KI dan faktor penyusun kesiapan KI.

Penelitian ini dimulai dengan *Systematic Literature Review* (SLR) untuk menentukan faktor-faktor pembentuk kesiapan KI dan *stakeholder* terkait. Perancangan struktur indeks kesiapan KI dilakukan dengan menentukan sub-indeks dan indikator dan dilakukan pengembangan kerangka model matematis IERI. Implementasi pengukuran IERI pada kasus nyata dimulai dengan penentuan bobot faktor IERI dengan menggunakan *Analytical Network Procees* (ANP), penentuan formula IERI dan pengukuran IERI pada KI Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020-2024. Dilakukan perbandingan antara nilai IERI dengan pembobotan ANP dengan pembobotan yang diasumsikan sama. Terakhir, dilakukan analisis regresi untuk mengetahui hubungan antara faktor kesiapan KI dengan tingkat okupansi KI. Validasi dilakukan dengan membandingkan hasil pengukuran kesiapan KI menggunakan IERI dengan pembobotan ANP maupun MLR dan hasil pengukuran kesiapan KI eksisting serta membandingkan hasil pengukuran antara KI Proyek Strategis Nasional (PSN) dengan non PSN dan perbandingan.

Hasil penelitian menunjukkan bahwa terdapat tujuh (7) faktor penting penyusun kesiapan KI, yaitu faktor Investasi, faktor Rantai Pasok, faktor Perusahaan KI, faktor Pasar, faktor Regulasi, faktor Kelembagaan Perusahaan Industri, dan faktor Akademisi. Hasil pengukuran IERI dengan pembobotan ANP menunjukkan faktor Investasi memiliki bobot paling besar (18,4%), diikuti faktor

Rantai Pasok (17%), faktor Perusahaan KI (16%) dan faktor Regulasi (16%), faktor Kelembagaan Perusahaan Industri (14,2%), faktor Pasar (13,9%) dan faktor Akademik memiliki bobot paling kecil (4,3%). Berdasarkan hasil analisis regresi linier, faktor yang berpengaruh kuat terhadap tingkat okupansi KI di Indonesia adalah faktor Pasar, faktor Rantai Pasok, dan faktor Perusahaan KI. Berdasarkan validasi hasil dengan perbandingan pengukuran kesiapan KI menggunakan IERI dengan pembobotan ANP maupun MLR dan hasil pengukuran kesiapan KI eksisting, maka alat ukur baru (IERI) yang telah dikembangkan menunjukkan hasil lebih baik daripada alat ukur kesiapan KI eksisting. Sedangkan dari hasil validasi pengukuran KI PSN dan non PSN, menunjukkan bahwa pada KI PSN, faktor Pasar sangat berpengaruh pada tingkat okupansi KI dan pada KI PSN, faktor investasi, faktor Pasar, faktor dan Perusahaan KI yang sangat berpengaruh pada tingkat okupansi KI.

Kata kunci : *Analytic Network Process*; indeks kesiapan; Indonesia; kawasan industri; okupansi

ABSTRACT

Manufacturing industry activities are encouraged in an industrial estate (IE). Until now, industrial activities are still concentrated in Java Island, which has 58% of the IE population. Until now, the average occupancy rate is below 50% and has not been set as a target achievement in the development document. The target achievement still focuses on the number of IEs built but does not consider the occupancy rate. The IE occupancy rate shows the occupancy level of industrial company tenants in the IE that has been built and the market absorption of the available IE plots, which can be one indicator of the success of IE development in Indonesia. Efforts to assess IE readiness have been carried out based on 11 assessment parameters. Based on initial observations, it is suspected that the efforts to assess IE readiness have not accommodated all stakeholders involved in the IE system in Indonesia and have not considered all factors that influence IE readiness. The existing measuring instruments for IE readiness are still partial because they only measure readiness for each factor. IE readiness is a complex concept because it involves various factors and related stakeholders, so if the measurement is carried out partially/separately on each factor, the interaction and relationship between factors that may affect overall IE readiness have the potential not to be identified. In addition, there are still weaknesses and limitations in existing research regarding the research methods used and the scope of readiness measurement. For this reason, it is necessary to develop a new measuring instrument to measure IE readiness in Indonesia comprehensively in the form of an IE readiness index (Industrial Estate Readiness Index/IERI) by involving related stakeholders in the IE system and the factors that compose IE readiness.

This study began with a Systematic Literature Review (SLR) to determine the factors that shape IE readiness and related stakeholders. The IE readiness index structure was designed by determining the sub-indices and indicators and developing the IERI mathematical model framework. The implementation of IERI measurements in real cases began with determining the weight of the IERI factors using the Analytical Network Process (ANP), determining the IERI formula, and measuring IERI in the 2020-2024 National Medium-Term Development Plan (RPJMN) IE. A comparison was made between the IERI value with the ANP weighting and the assumed same weighting. Finally, a regression analysis was conducted to determine the relationship between the IE readiness factors and the IE occupancy rate. Validation was carried out by comparing the results of IE readiness measurements using IERI with ANP or MLR weighting and the results of existing IE readiness measurements and comparing the results of measurements between the National Strategic Project (PSN) IE with non-PSN and comparison.

The results of the study indicate that seven (7) important factors compose IE readiness, namely Investment factors, Supply Chain factors, IE Company factors, Market factors, Regulation factors, Industrial Company Institutional factors, and Academic factors. The results of IERI measurements with ANP weighting show that the Investment factor has the most significant weight (18.4%), followed by the Supply Chain factor (17%), IE Company factors (16%) and Regulation factors (16%), Industrial Company Institutional factors (14.2%), Market factors (13.9%) and Academic factors have the most negligible weight (4.3%). Based on the results

of the linear regression analysis, the factors that strongly influence the level of IE occupancy in Indonesia are Market factors, Supply Chain factors, and IE Company factors. Based on the validation of the results with a comparison of IE readiness measurements using IERI with ANP and MLR weighting and the results of existing IE readiness measurements, the new measuring instrument (IERI) developed shows better results than the existing IE readiness measuring instrument. Meanwhile, the results of the validation of the PSN and non-PSN IE measurements show that in PSN IE, market factors have a significant influence on the IE occupancy rate, and in PSN IE, investment factors, market factors, and IE company factors have a significant influence on the IE occupancy rate.

Keywords : *Analytic Network Process; Indonesia; industrial estate; occupancy; readiness index*