

INTISARI

Industri manufaktur merupakan kontributor utama pertumbuhan ekonomi di Indonesia yaitu sebesar 19,88 persen. Daerah Istimewa Yogyakarta adalah salah satu wilayah di Indonesia dengan pertumbuhan ekonomi tertinggi dari 33 provinsi lainnya yaitu 12,58 persen. Namun, pertumbuhan ekonomi di Daerah Istimewa Yogyakarta mengalami penurunan sebesar 5,36 persen. Disisi lain, kesiapan industri manufaktur dalam Industri 4.0 memberikan dampak yang besar dalam tercapainya efisiensi dan peningkatan produktivitas. Penelitian ini bertujuan untuk mengukur tingkat kesiapan Industri 4.0 di Daerah Istimewa Yogyakarta.

Penelitian ini menggunakan indeks pengukuran Indonesia *Readiness Index* (INDI 4.0) untuk mengukur kesiapan industri manufaktur di Daerah Istimewa Yogyakarta. Sampel penelitian ini berjumlah 80 perusahaan yang dipilih menggunakan teknik *purposive sampling*. Kriterianya adalah perusahaan yang masuk dalam daftar Badan Pusat Statistik industri manufaktur di Daerah Istimewa Yogyakarta dan bersedia untuk dimintai keterangan kesiapan INDI 4.0. Data penelitian dikumpulkan melalui kuesioner pengukuran INDI 4.0 dengan lima pilar yaitu manajemen dan organisasi, orang dan budaya, produk dan layanan, teknologi dan operasi pabrik.

Hasil penelitian ini menunjukkan bahwa pilar kesiapan Industri 4.0 industri manufaktur di Daerah Istimewa Yogyakarta, yang menunjukkan *level* 1 yaitu pilar manajemen organisasi, teknologi, dan operasi pabrik. Sedangkan pilar produk layanan serta orang dan budaya pada *level* 2. Hasil ini menunjukkan bahwa manajemen organisasi, teknologi dan operasi pabrik sudah memiliki rencana bertransformasi ke Industri 4.0. Sementara itu, pilar produk dan layanan serta orang dan budaya sudah mengenal transformasi ke Industri 4.0. Hasil penelitian ini menunjukkan bahwa industri yang paling siap bertransformasi ke Industri 4.0 dengan *level* 3 yaitu industri makanan sebesar 16,67% dan industri non logam sebesar 14,29%. Sementara itu, industri yang paling belum siap dengan *level* 0 yaitu industri cetak sebesar 11,11% dan industri furnitur sebesar 15,38%. Strategi peningkatan Industri 4.0 yang diharapkan dapat meningkatkan kesiapan Industri 4.0 adalah pertimbangan Industri 4.0 dalam strategi perusahaan, perlunya training/ workshop/ pendidikan/ sertifikasi terkait Industri 4.0, tersedianya kustomisasi produk, keamanan *cyber* pada perusahaan dan adanya kontrol otonom pada perusahaan.

Kata kunci: Industri Manufaktur DIY, INDI 4.0, Kesiapan Industri 4.0

ABSTRACT

The manufacturing industry is the main contributor to economic growth in Indonesia, which is 19.88 percent. The Special Region of Yogyakarta is one of the regions in Indonesia with the highest economic growth out of 33 other provinces, namely 12.58 percent. But unfortunately, economic growth in the Special Region of Yogyakarta decreased by 5.36 percent. On the other hand, the readiness of the manufacturing industry in Industry 4.0 has a big impact in achieving efficiency and increasing productivity. This study aims to measure the level of readiness of Industry 4.0 in the Special Region of Yogyakarta.

This study uses the Indonesia Readiness Index (INDI 4.0) to measure the readiness of the manufacturing industry in the Special Region of Yogyakarta. The sample of this study amounted to 80 companies selected using purposive sampling technique. The criteria are companies that are included in the list of the Central Statistics Agency for the manufacturing industry in DIY and are willing to be asked for information on the readiness of INDI 4.0. Research data was collected through the INDI 4.0 measurement questionnaire with five pillars, namely management and organization, people and culture, products and services, technology and factory operations.

The results of this study indicate that the pillars of readiness of Industry 4.0 are the manufacturing industry in the Special Region of Yogyakarta, which shows level 1, namely the pillars of organizational management, technology, and factory operations. Meanwhile, the product and service pillars as well as people and culture are at level 2. These results indicate that organizational management, technology and factory operations already have plans to transform to Industry 4.0. Meanwhile, the pillars of products and services as well as people and culture are already familiar with the transformation to Industry 4.0. The results of this study indicate that the industries that are most ready to transform to Industry 4.0 with level 3 are the food industry at 16.67% and the non-metal industry at 14.29%. Meanwhile, the most unprepared industries with level 0 were the printing industry at 11.11% and the furniture industry at 15.38%. The strategy for improving Industry 4.0 which is expected to increase the readiness of Industry 4.0 is the consideration of Industry 4.0 in the company's strategy, the need for training / workshops / education / certification related to Industry 4.0, the availability of product customization, cyber security in the company and the existence of autonomous control in the company.

Keywords: *Manufacturing Industry in DIY, INDI 4.0, Industry Readiness 4.0*