

ABSTRAK

PT. GMF AeroAsia merupakan perusahaan MRO berbasis teknologi terdepan di Indonesia. Dalam memenuhi target revolusi industri 4.0 perlu dilakukan pengukuran kesiapan I4.0 supaya dapat termonitor dan terukur. Namun saat ini belum ada pengukuran kesiapan I4.0 di unit *Line Maintenance Hangar Support* perusahaan tersebut. Untuk itu penelitian ini dilakukan untuk mengetahui tingkat kesiapan i4.0 di unit ini menggunakan metode *I4.0 Readiness Index*, yang berfokus pada pada pilar operasi pabrik yang mencakup *Data Life Cycle*, *Product Life Cycle*, *Design Principle* I4.0, dan *Technology Element*. Keempat dimensi ini terdiri dari 22 aspek indikator kesiapan I4.0 operasi pabrik. Untuk mengetahui aspek mana saja yang menjadi prioritas perbaikan, digunakan metode CARL. Hasil akhir dari *assesment* ini diperoleh bahwa skor kesiapan I4.0 di unit ini adalah 2,25 yang berarti secara keseluruhan operasi pabrik pada unit berada pada kesiapan sedang (level 2), *Data Life Cycle* (2,50), *Product Life Cycle* (2,57), *Design Principle* (1,60) dan aspek *Technology Elements* (2,33). Prioritas tertinggi adalah aspek Transmisi data (*Data Life Cycle*), Perencanaan, Pemantauan lingkup produksi, dan Pemantauan teknologi pendukung distribusi dan Pelacakan (*Product Life Cycle*). Sedangkan Prioritas yang paling rendah, yaitu aspek Bantuan teknis robot & mesin otomatis (*Design Principle*) dan Sistem pendukung keputusan dan pengambilan keputusan otomatis (*Technology Element*).

Kata Kunci : Industri 4.0, INDI 4.0, Tingkat Kesiapan, Industri Penerbangan, Operasi Pabrik



ABSTRACT

PT. GMF AeroAsia is the leading technology-based MRO company in Indonesia. In meeting the industrial revolution 4.0 target, it is necessary to measure I4.0 readiness so that it can be monitored and measured. However, currently there is no measurement of I4.0 readiness in the company's Line Maintenance Hangar Support unit. For this reason, this research was conducted to determine the i4.0 readiness level in this unit using the I4.0 Readiness Index method, which focuses on the pillars of factory operations which include Data Life Cycle, Product Life Cycle, Design Principle I4.0, and Technology Elements. These four dimensions consist of 22 aspects of factory operation readiness indicator I4.0. To find out which aspects are the priority for improvement, the CARL method is used. The final result of this assessment is that the readiness score of i4.0 in this unit is 2.25 which means that overall the factory operations in the unit are in moderate readiness (level 2), Data Life Cycle (2.50), Product Life Cycle (2 .57), Design Principles (1.60) and aspects of Technology Elements (2.33). The highest priority is the aspect of data transmission (Data Life Cycle), Planning, Monitoring of production scope, and Monitoring of distribution and tracking supporting technology (Product Life Cycle). While the lowest priority, namely aspects of robot & automatic machine technical assistance (Design Principle) and decision support systems and automatic decision making (Technology Element).

Keywords: Industry 4.0, INDI 4.0, Readiness Level, Aviation Industry, Factory Operation



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