Models and Big Data Analytics in the Modern Industry

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The main goal of the manufacturing industry is to produce more efficiently by reducing costs. This new paradigm is addressed under the framework of Industry 4.0 that develops new technologies and methods such as embedded sensors and wireless connectivity that need to be analyzed in a Big Data environment. Someone of these methods, such as Condition monitoring (CM) and Big Data Analytics (BDA) offers an unprecedented opportunity to track machine-tool performance and health condition.

The objective is to present some experiences about the trends of the manufacturing industry in a big data environment, as well as the readiness of smart predictive tools, thereby achieving efficiency and improve productivity.