Executive Summary

**Industrie 4.0 Maturity Index**

Managing the Digital Transformation of Companies

The objective of digital transformation is to become a learning, agile enterprise which, on the basis of data, makes better decisions faster and is capable of continually adapting itself to a changing environment. At this point the “Industrie 4.0 Maturity Index” comes into play: the multidimensional maturity index facilitates the status quo analysis especially for small and medium sized companies and the development of their individual roadmaps.

The digital transformation of companies is more than solely considering networked IT technologies. Modern technologies enable the setup of larger databases. In order for digital transformation to succeed, it is necessary to transform the organizational and cultural aspects of a company as well.

Six utility-oriented maturity stages determine the status quo and the goal

The “Industry 4.0 Maturity Index” guides the way of digital transformation from the basics to a learning, agile company.

Six development stages show which capabilities are necessary for utilizing Industrie 4.0. The model takes the multi-dimensionality of Industrie 4.0 into account and its interplay with information systems, resources, business organization and corporate culture.

The desired target state of a company is derived from its specific business strategy in the business units development, production, logistic, service, marketing and sales. Therefore, it can only be determined for each company individually, at the stage which provides the best cost-benefit ratio.

From inside out: Six stages describe a company’s readiness for Industrie 4.0

1. Support from data processing systems: Employees are relieved of repetitive activities.
2. Systems are structured and interconnected: IT systems reflect the core business processes.
3. Companies have a digital shadow: Management makes data-based decisions.
4. Companies understand why something happened: Knowledge comes from understanding.
5. Companies know what is going to happen: Decisions are based on future scenarios.
6. Companies autonomously respond to events: Systems are self-regulating and operate robustly.

The extent of existing Industrie 4.0 capabilities forms the basis for the derivation of individual measures.

The Industrie 4.0 capabilities defined in the "Industrie 4.0 Maturity Index“ have been aligned with current challenges and activities of manufacturing companies.

The degree of implementation of the capabilities defined in the maturity stages, which hierarchically build on each other, serve to determine the company’s level of maturity.

Based on the current maturity level, tailor-made plans for action are developed to successfully implement digital transformation on a step-by-step development path.

In a three-week project, which includes the kick-off meeting, a workshop, and the presentation of results, companies get to know their fields of action for their digital agenda and receive recommendations on the implementation of the operational guidelines.

For the full research paper, please visit: http://bit.ly/MaturityIndex