The digital transformation is changing the world

Efficient data analysis can be the factor that makes or breaks a company today – no matter whether it is involved in industry, infrastructure, energy generation or many other sectors.

With MindSphere, Siemens is providing a cloud-based, open operating system for the Internet of Things. On this platform as a service (PaaS), applications (apps) and digital services can be developed, operated and provided.

As a result, the immense amount of data produced by a plant or company can be quickly and efficiently collected as well as analyzed, resulting in better optimization.

Recommendations for action derived from data analysis

Regardless of the industry involved, with MindSphere, the raw data produced by plants and systems can be comprehensively analyzed with the help of a wide range of apps. This information could be performance data of a global manufacturing landscape, important figures about trains during operation, or the status of an electric grid.

Resulting recommendations for action can continuously optimize a facility – in such areas as resource usage. With regard to predictive maintenance it is also possible to identify potential problems at a very early stage enabling right decisions made at the appropriate time.

The obtained data can also improve the design, the performance and availability of the systems. Customers benefit from the optimized assets and can prevent errors.

Use available apps – or develop and provide your own

MindSphere provides a wide range of applications for different purposes and usages (MindApps). In addition, customers and partners can develop, use and operate their own applications on the platform as well. These applications facilitate new digital services that, on the basis of the efficient use of collected
data, create a competitive edge – for instance, in the form of guaranteed availability of machines, optimized resource usage and increased productivity.

Simple Connectivity
With MindConnect, Siemens offers a range of ways to simply and securely link machines, plants and systems to MindSphere. With MindConnect Nano customers have the possibility to read data from an asset with the help of a plug-and-play solution and then to securely send them in encrypted form to MindSphere – and to frequently do so after just about an hour of installation time.

Data as the basis for new business models
The connection of assets to MindSphere facilitates not only the optimal use of energy and resources for example, but also the implementation of new business models. Examples include the sale of machine hours or availability in place of the actual machine.

For more information: www.usa.siemens.com/innovationUS