Interview with Anton S. Huber on the Digital Enterprise

The CEO of the Siemens Digital Factory Division talks about the virtual representation of product development and production, virtual commissioning, and necessary new ways of collaboration.

Siemens AG / E. Malter

» Mr. Huber, Siemens sees the industrial enterprise of the future as a Digital Enterprise. What do you understand by this idea?

Because many activities in a company are now supported by software, the task is to seamlessly digitalize the companies' core processes and the overall product development process and to support it with software tools. In the future, no part of this value chain will be able to do without its digital copy. This includes the product concept, the engineering of both product and production, commissioning, and use, as well as new services offered in the context of or on the basis of the product. The main aspect of a Digital Enterprise is that it has seamlessly and digitally mapped and linked the value chain processes.

Is the Digital Enterprise then the digital copy of the company?

The digital representation of the value chain is just one aspect, but an important one. The Digital Enterprise emerges from the connection of the real company with its digital image. The intelligent collaboration of these two worlds, the digital and the physical, leads to the economical advantages that

are absolutely vital to maintain competitiveness and project profitability in global business.

What does Siemens offer its customers for them to swiftly develop their companies into Digital Enterprises?

It is absolutely clear that no company is able to modernize its entire software and IT structure over night. The most important factor is to start from the right point and to develop a long-term migration and innovation program that makes the necessary transformation attractive in terms of cost-effectiveness as well. As a first step, we recommend implementing a shared, company-wide data management platform. This is what we did in our own company too. For this purpose, Siemens offers its Teamcenter software, which is the global market leader when it comes to industrial data management platforms.

Amberg is often given as an example for Industrie 4.0. What does Industrie 4.0 have to do with the Digital Enterprise?

With Digital Enterprise, you can keep track of the entire value-added chain of a company. In the case of Industrie 4.0, this mainly applies to the field of production, focusing on the stand-alone organization of the production process.

As Amberg is a production facility, we take this site as an example to demonstrate the effects of digitalization on exactly this process of a company. The main focus here is on how the data of different processes are linked and not on the application of cyber-physical components and strategies, even if, in practice, we already have been using the "intelligent workpiece" (carrier) for many years.

In the context of its restructuring in 2014, Siemens created, among others, the Digital Factory Division. What does this division include?

In the Digital Factory (DF) Division, Siemens concentrates all the software, hardware, and automation know-how that is needed for a digital factory. Furthermore, it also includes software that is essential for the entire product development process of a company down to the suppliers.

From the market's point of view, DF addresses discrete production and the respective customers. The entire wealth of know-how and assets needed for the process industry were concentrated in Process Industries and Drives (PD), our associate division.

«