

SMART MAINTENANCE NAVIGATOR. THE DIGITAL TWIN OF PHARMA INDUSTRY

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Nowadays, the pharmaceutical industry is confronted with a highly competitive market, regulations and demands. To adapt to the market needs, companies identify flexibility and agility as key environment drivers in order to be competitive and ensure growth.

Today we live in remarkable times of digitalization where technologies such as IIoT, AI, and ML, enables us in daily work and undergoing processes. Already mentioned technologies can drastically increase competitiveness and provide significant savings in costs, effectiveness, and time to market. Since its first introduction in 2002 by Michael Grieves, the digital twin concept spread within the pharma industry for almost two decades now. With the help of the Industrial Internet of Things (IIoT), it has significantly developed into a dynamic virtual model of a system, process or service.

ZETA has long-standing process know-how, in combination with sophisticated software solutions as a system integrator. Coping with the latest demands and needs on the market, ZETA has introduced a new digital tool called „Smart Maintenance Navigator“ (SMN) that supports the engineers in smooth plant operation and commissioning.

The navigator is the digital twin of the production site, providing 2D and 3D models of the plant, listing the equipment and guiding the engineers through the work process. SMN supports engineers in their daily activities. As a virtual assistant, it creates a link between relevant information for maintenance intervals and plant data. Once accessed, the navigator, via a user-friendly interface, shows the essential data on spare parts and the tools needed for work assembly, based on the digitally stored manuals. In contrast to paper documents or PC-based systems, the Smart Maintenance Navigator is flexible to use, runs on smart devices and is always up to date with the as-built status of the plant.

ADVANTAGES OF ZETA'S SMART MAINTENANCE NAVIGATOR:

- Engineer's personal assistant, always at the side.
- Plant status at a glance.
- Maintenance jobs require less time.
- First time right – also for new equipment/technology
- Less time needed to train new staff
- Digital documentation of performed tasks

