

THE FACTORIES OF THE FUTURE ARE BEING BUILT TODAY

Many factors come into play when designing the factory of the future. This is hardly a surprise as increasingly complex global markets are challenging old organizational models.

To prosper in today's incredibly dynamic conditions, companies need to fundamentally rethink many of their structures, processes and management approaches.

With the building blocks of future-oriented production established, and using concrete examples drawn from our own experience, we'll show you in this newsletter how the Future Factory is becoming reality today...

BUILDING BLOCKS OF THE FUTURE FACTORY

Industrial structures are characterized by growing diversity. Nevertheless, overarching trends centred on flexibility, sustainability and lean management can still be identified, as well as mandatory technological and organizational elements that are relevant to any production design.

Our interdisciplinary insight into the factory of the future sheds light on these developments and the necessary building blocks.

DIGITAL TWINS: ROBERT BOSCH LIFTS THE LID ON ITS TREASURE TROVE OF DATA

Robert Bosch GmbH in Bamberg, winner of the [ROI-EFESO INDUSTRIE 4.0 AWARD 2021](#), presents a fascinating picture of what intelligent, future-oriented production can look like.

Here, a digital twin is created of each manufactured product, such as an injection valve, with over 1,500 data points routinely gathered, any or all of which can then be fed into both current and future AI applications. The resulting evaluations can be used to optimise processes, ensure quality and implement customer wishes faster than ever before...

TRANSFORMATION BEGINS WITH PEOPLE

Rapid networking, ever faster information exchange and shorter innovation cycles can push organizations and people to their absolute limits. [Sebastian Diers](#), Managing Director of ROI-EFESO, believes that it is up to management to take charge of developments and to be seen to be actively steering them, if they want those in their organisation to buy into their vision.

Transformation is not just about the application of technologies. It's as much about the simultaneous evolution of behavior, processes and structures. And how management teams generate the required momentum, vital if radical transformation efforts are to succeed.

FROM DIGITAL PROCESS TO DIGITAL ECOSYSTEM

Increasingly, more and more processes, products and factories now have a digital twin. In this interview, [Jonas van Thiel](#), Partner at ROI EFESO, looks at the different types of digital twins, their areas of application in industry, and their organisational requirements.

In the interview we also learn how Factory Twins help to optimise processes, achieve quality targets and deliver real-time ESG reporting, and why cross-enterprise open source ecosystems are becoming ever more important.

