A MESSAGE FROM THE EDITOR



echnological advancements available today are elevating manufacturing industries towards an intelligent, autonomous factory system integrated with the internet and fueled by data. This smart factory facilitates machinery to learn and provide accurate real-time data to enable pro-active decisions. Although the implementation is still in its infancy, manufacturers are already adopting a smart system initiative or are planning to have one. This will reshape the way manufacturing is seen today.

But the future of manufacturing is not realized by what is happening on the shopfloor today. The technological advancements of tomorrow are made through research, curiosity, and willingness to improve. To actually shape the future, we often have to think outside the box. To quote science-fiction writer and futurist Sir Arthur Charles Clarke: "the only way to discover the limits of the possible is to go beyond them into the impossible". We can interpret this in a way that ideas no matter how ridiculous they may sound in the beginning might become reality at some point in time. By continuously discovering new possibilities and adapting we can achieve more than we ever thought we were able to. The leaps taken in technological advancements, visibility and performance provide potential to industry that we are only just beginning to tap into.

There is a clear opportunity for manufacturers to accelerate their digital-transformation journeys and achieve the higher levels of productivity they need in the short term to keep them ahead of the curve. The critical task is to future-proof their digital transformation so that the technology and processes they introduce now don't lock them out of the next round of advances.

Future-proofing starts with a clear vision for how digital manufacturing will deliver a competitive advantage. Without, it's easy to be led by the latest shiny object rather than focusing on the digital-manufacturing solutions that address specific operational pain points and drive tangible bottom-line impact. It is therefore of great significance that knowledge transfer and training are set as the number one priority to shape the (r)evolution of manufacturing. Not surprisingly, the only way to go into the impossible is to have education as your driving force.

Gijs Beumkes

Research Engineer Fraunhofer Project Center at the University of Twente

