# IS ALWAYS AN INVESTMENT IN SYSTEMS, DIGITALIZATION, PEOPLE, AND ORGANIZATIONAL STRUCTURES

What is the difference between CapEx optimization and traditional cost reduction?

In my opinion, it is too short-sighted to consider CapEx only in terms of cost reduction. Investments in the CapEx environment can take effect in several ways: Firstly, costs can be shifted – from variable to fixed costs – with the aim of reducing the total production costs per unit. At the same time, however, this reduces flexibility in the face of volume fluctuations. This means that although highly efficient production lines are

very cost-effective, they have to operate at 100 percent capacity over a long period of time. In addition, investments in a higher degree of automation enable savings to be made on currently scarce personnel and thus increase the attractiveness of Europe as a business location. And finally, investments in the CapEx environment can help to reduce the costs for the operation of machines and systems. For companies in Europe, this is currently particularly relevant in light of the high energy costs.

### What levers are there to optimize CapEx-related investments within this logic?

Looking at the expansion of your own production capacities, e.g., by purchasing new machines or building a factory, there are various starting points for optimizing the associated investment costs. On the one hand, intelligent factory planning, high-capacity utilization and OEE (Overall Equipment Effectiveness) and better throughput, the machine requirements – and thus the CapEx requirements - can be reduced directly. On the other hand, the complexity of the machinery offers levers for CapEx reduction, e.g., along questions such as: How high should the degree of automation be? How flexible and modular should the systems be? It is important for companies to find the right balance between capital expenditure and the subsequent operating costs during ongoing processes. And finally, the cost of procuring the machines can be optimized by choosing the right suppliers.

# How far does the CapEx approach extend? Is it just about planning and procurement, or does it go further?

It would be far too short-sighted to consider only the acquisition costs of the machines and systems. Rather, the investment must also consider the opportunity costs that are incurred until a line or system is actually up and running. This includes the costs for the commissioning itself, especially in highly regulated environments. At the same time, the time from the purchase of the machine to actual production is synonymous with lost sales. The faster the 100 percent

ramp-up is achieved, the lower the lost contribution margins. In most companies, there is still enormous untapped potential in optimizing this ramp-up phase.

## What influence do process innovations have on investment decisions in the CapEx environment?

Process quality in the production environment is often a decisive competitive factor, especially for mass-produced products. From a CapEx perspective, the associated investment decisions regarding new production processes are of great significance, as the processes in which investments are made are generally used for many years. Companies should, therefore, optimize innovation cycles. They must keep an eye on the leaps in new manufacturing processes and carefully weigh up when to invest in the relevant technologies.

### To what extent do such technological leaps result in new investment requirements?

One question is: When do I invest in a new production technology? The other question is: What do I need to be able to use this technology effectively? This is because new technologies generally require different skills that need to be invested in. For example, if you want to operate a highly automated system, you need appropriate maintenance personnel who must be set up and trained. These systems produce data with which something must be done, otherwise the investment will not be used. This in turn requires new functions and structures in the organization. In other words, future investment



in modern technologies will not just be an investment in a system. It will also be an investment in systems, digitalization, people, and organizational structures.

### Do these costs also count as CapEx?

Perhaps not in purely accounting terms. But in terms of the idea, it is an investment in the future. At this point, it may be useful to take a broader view of the term CapEx to clarify that it involves more than just purchasing a system. There is a whole range of other issues related to this hardware that also need consideration, which may not be visible or tangible at the time of investment.

