

# PRODUCTIZATION OF AUTOMATION AND DIGITAL SERVICES

The development of software-based products is relatively fast, and attention is often focused solely on the features visible to the end user. A superficially functional product version can be quickly completed. However, this may leave features hidden beneath the surface or missing, which significantly impact the product's lifecycle costs. Inadequate overall planning makes product maintenance, versioning, and further development difficult and costly. Similarly, product support becomes challenging, and the product's reliability may suffer. Our expertise is focused on solving these challenges.

## **Designing Software-Based Features and Lifecycle Profitability**

How to manage software and related hardware solutions for industrial products with a lifecycle of 10-15 years? Most products continue to operate in the field for at least 10 years after manufacturing has ceased. Availability of spare parts often becomes problematic because hardware component lifecycles are short. The development organization may have changed during this time, and there may be no available tacit knowledge about product requirements, specifications, and solutions. We can provide expertise in addressing these challenges based on our experience with various software-based product deployments and their lifecycle support challenges. We have made mistakes in the rush and learned through a painful process. Now, this experience is at your disposal to support the development of your successful products and operational processes.

## **How do we support digital services related to automation or industrial products?**

Our approach always depends on the customer's needs. How much experience does the company have in system design, software specification, development, and testing? What are the company's available resources? Are external partners used in software and hardware development? We tailor our support concept to the project, although the same principles apply in different cases. We can participate in product requirement specifications, software design, software development oversight, and design reviews, as well as maintenance and support service development. Typically, our role in the project is to act as an integrator for decentralized automation and software development and to ensure the product's productization from requirements to development and testing, cost-effectively.

## **Impact to Lifecycle Profitability**

The profitability of a product throughout its lifecycle is established during the product's design phase. As a rule of thumb, it can be said that about 20% of the lifecycle costs of a software-based product are incurred during the development phase, and the remaining 80% during the maintenance phase. A good product architecture, modular structure, and clear interfaces enable the product to be further developed and maintained with high quality and cost-effectiveness. Implementing maintenance and support functions during the development phase enables quality and profitable maintenance business. We have practical experience in all stages of the lifecycle.

If software-based industrial products are built solely on functional features, the role of lifecycle support is often overlooked. Product specifications are made with user needs in mind, while product support in various conditions is forgotten. However, a successful product requires both dimensions. Therefore, understanding customer needs and knowledge of support business is the path to a profitable success product.

# OUR OFFERING

1. **Assessment of Needs, Products, and Software Development Capabilities**
2. **Lifecycle Planning Support for Specifications**
3. **Participation in Project Management and Content Production as Agreed**
4. **Integration of Software Supplier Network into Development with a Lifecycle Focus**
5. **Development of a Simulator-Based Development, Testing, Support, and Training Environment in collaboration with our simulator partner**
6. **Design Reviews**