

ROAD TO DIGITAL

ROADMAP FOR BUILDING A DIGITAL PRODUCT AND SERVICE BUSINESS IN MECHANICAL ENGINEERING AND SYSTEMS CONSTRUCTION

By Amseln Magel, Partner Digital,
ROI Management Consulting AG

PHASE 1

PHASE 2

EXAMINATION TECHNOLOGY DRIVERS



- > IDENTIFICATION OF RELEVANT UNDEFINED DRIVERS
- > APPLICATION OF UNDEFINED TECHNOLOGY IMPULSES IN THE CUSTOMER ENVIRONMENT
- > GENERATION OF POSSIBLE PRODUCT IDEAS
- > SURVEYING LEAD USERS AS TO IMPLICIT AND EXPLICIT REQUIREMENTS
- > ANALYSING REQUIRED SATISFACTION OF NEEDS/ PROBLEM SOLUTIONS

DIGITAL STRATEGY SPRINTS



- > STRATEGY SPRINT PER SATISFACTION OF NEEDS/ PROBLEM SOLUTION
- > PREPARATION AND DEVELOPMENT OF MARKET UNDERSTANDING
- > ANALYSIS OF THE MARKET SITUATION AND POTENTIAL DIGITAL IMPACT
- > ELABORATION OF DIGITAL BUSINESS MODELS
- > ANALYSIS OF THE POTENTIALS AND PRIORITISATION
- > ELABORATION OF DIGITIZATION INITIATIVES

Procedure for strategic development of the digital product and service business for plant and machine constructors

The conditions for mechanical engineers and software manufacturers could hardly be more different when it comes to developing new products: On the one hand, up to 20,000 components per system, often fewer than 100 systems produced per year and a lifespan of more than 25 years on the market – on the other hand, a product that is often intangible, that can be multiplied at minimal marginal cost and that hardly follows fixed product cycles.

THE WINNER TAKES MOST

In order for mechanical engineers to successfully master the leap from hardware manufacturer to provider of digital or software-based products and services, the procedure for setting up new product fields must be resolutely adapted to the mechanisms of the new market. The key challenge is the speed of defining, developing and scaling the digital business. On the one hand, faster customer acquisition compared to the com-

petition ensures that companies can benefit from economies of scale at an early stage, which can lead to a “winner takes most” position in the market. On the other hand, new digital businesses, especially in the platform economy, often require a critical mass of participants in order to generate added value. This requires a well-planned, phased approach, from the study of undefined digital technology drivers to the

hyper-scaling of digital business models. The first two phases (“Investigation of Technology Drivers” and “Digital Strategy Sprints”) are a key part of the strategy development and will be described in more detail below:

