Andreas Gadatsch

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Analysis, Modelling, Optimisation and Controlling of Processes

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Preface to the First Edition

After the 9th edition of this textbook was published, process management has developed strongly through the trend of digitalization and as a result of the "pandemic". Process management is unthinkable without digitalization in most cases. A new trend is the increased use of data science methods for process management, which is consequently referred to as "process science".

Of particular importance are recent research results that have been published under the heading "exploratory process management". They show that the first main phase of process management was primarily focused on the optimization of existing processes and business models. The exploratory business process management penetrates into the domains of information management, but also business field development and deals with innovative new business models for which processes have to be fundamentally redesigned.

New practice examples have been included in various places in the book, such as the migration strategies for the ERP system "SAP S/4 HANA", which forms the basis for many industrial and service processes.

The chapter on process modeling has been updated and newer, more far-reaching methods, such as the business model canvas, have been included. The modeling examples have been supplemented on the basis of a small, consistent case study on the takeover of a general practitioner's practice.

A quick test at the beginning of the book can be used by readers from professional practice to carry out a first analysis of their own situation. The corresponding file can be requested from the author. This also applies to the illustrations that can be used for teaching purposes. An email to andreas.gadatsch@h-brs.de is sufficient for this.

Despite the long running time of this textbook, it can be assumed that there will still be no error-free book after 22 years. The author is grateful for corrections and constructive suggestions for improvement, for example to the email address mentioned.

For the sake of better readability, we mainly use the generic masculine in this book. This always implies both forms, i.e. it also includes the female form.

Sankt Augustin Andreas Gadatsch
July 2022

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