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# Process Innovation: Enabling Change by Technology

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# Process Innovation: Enabling Change by Technology

Basic Principles and Methodology:  
A Management Manual and Textbook  
with Exercises and Review Questions

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## Preface to the Second Edition

Digitalization has become an integral part of modern-day life, and business administration is no exception. There are wide-ranging fields of application, and process-oriented companies in particular stand to benefit long term from digitalization and the implementation of process innovations. In addition to the redesign of processes and strategies, a special emphasis is placed on technology, which makes change possible in the first place.

This second edition introduces process innovations based on the digital transformation of business models. The redesign of processes is supported by market-related (market pull) and technology-related (technology push) implications with company-specific fields of action to generate an overall picture. The objective of this approach is to meet future customer needs through leading market technologies. To help improve comprehension of these processes, the content regarding market and customer segmentation has been amended and expanded. The chapter on the process vision has seen the greatest expansion due to the addition of technology foresight and the integration of technology- and market-related aspects. Using additional examples, the potentials of digitalization have been consistently identified and updated with further illustrations. Furthermore, additions have been made to the process deliverables and further sources for new technologies have been added. Last but not least, additions were made within process management.

We would like to thank Ann-Kristin Wiegmann (Springer Gabler) and Bujar Ramosaj (Ulm University), whose help with the revision has been invaluable.

We hope you have an enjoyable time reading this book and wish you success in innovating future processes.

Ulm  
April 2018

Daniel R. A. Schallmo  
Leo Brecht

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# Abbreviations

ABB.	Asea Brown Boveri
approx.	Approximately
B2B	business to business
cf.	confer
CO <sub>2</sub>	carbon dioxide
CSF	critical success factor
Dr.	Doctor
e	electronic
e.g.	for example
EFQM	European Foundation for Quality Management
EQA	European Quality Award
esp.	especially
et al.	and others
etc.	et cetera
f.	and the following page
ff.	and the following pages
GPS	Global Positioning System
HTML	Hypertext Markup Language
IAO	Fraunhofer Institute for Industrial Engineering
i.e.	that is
incl.	including
IT	information technology
KPI	(key) Performance indicator
MIT	Massachusetts Institute of Technology
p.	page
PC	personal computer
R&D	research and development
RFID	radio-frequency identification
SCOR	supply chain operations reference
TFP	technology foresight process
US	United States
www	World Wide Web

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