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Introduction

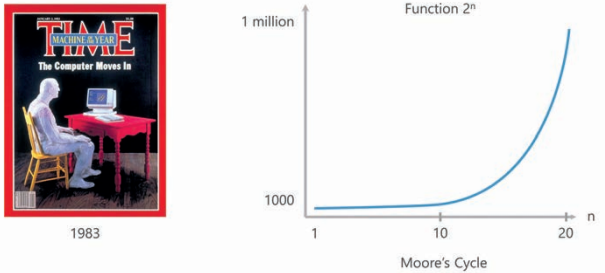


Figure 1.01: Time Magazine 1983 and Moore's Cycles

In 1983, the PC was distinguished by TIME Magazine as "Machine of the Year" (see Fig. 1.01), even though usually only important people are mentioned. Already at this time, the magazine wanted to highlight the great importance of the computer. Since then, around 20 Moore's cycles on the development of information technology are behind us, after each of which performance doubles. Performance has therefore increased by a factor of millions. Now quantity is changing into quality; possibilities to develop new products and processes are arising which were unthinkable just a few years ago. Catchphrases like "Industry 4.0" or "Software is eating the world" (Andreessen, 2011) are proof of the high expectations of researchers and practical experts in the power of digitization for change. Many changes in the private sector are already apparent through social media and the Internet.

This work will deal with digital changes by companies. In Part 1, drivers of success for the development of digital business models will first be analyzed and demonstrated using numerous examples. Subsequently, new business models will be developed as holistic industry concepts for consulting companies, industrial companies and universities. In this way, service, industrial and public organizations

and a wide range of disruptive opportunities for change will be dealt with. They show the profound influence on structures and should inspire the reader to develop concepts for his own company.

Part 2 will deal with implementation concepts for the design and management of digital companies. This concerns above all the automation of business processes, because these form the core of digital business models.

In the foreground is the examination and assessment of the organizational effects of digitization, so that technical aspects should only be dealt with only as far as is necessary for their understanding.

The illustrations used throughout the book are available online as PDF at www.aws-institut.de/enterprise4-0.