
Preface

At least two of the authors of this book have reached an age at which it is not uncommon to witness, often in disbelief and sometimes stunned, the younger generation that are commonly referred to as millennials, or Generation Y. We encounter millennials in talent management, in the workplace, in associations and clubs, but also in our families; in other words, we associate with them in all sectors of society. Born in the period that spans the early 1980s to the beginning of the new millennium, millennials constantly push boundaries in search for new meaning and the perfect work-life balance. Their professional biographies are characterized by internationalization, changing fields of activity, and phases of varying work intensity, exhibiting a mixture of professional as well as social tasks. They demand increased societal as well as environmental responsibility from their employers, and they require room for their personal development. More importantly, they seek praise and appreciation for their dreams, their visions, and their achievements.

It is of little value to examine and assess millennials based on their current behaviors—they are way too dynamic for that. Instead, we must comprehend where they come from, what has formed them, what influences them, and what they consider important in their lives. To achieve this, we must look back at their early years in life, their time at school, and their professional training which is when the millennials often finish their formal education or studies—in other words, when millennials reach *graduation*. This provides us with the basis on which we might dare to look into their future.

Considerations like these have motivated us to write this book. After all, the Web is just another (albeit non-human) millennial and unquestionably one of the most important companions in the lives of human millennials. Its evolution has taken it from a simple means to communicate as Web 1.0 to a Web of participation, otherwise known as the Social Web or Web 2.0, to today where the Web now infiltrates all aspects of our private and professional lives as a core driver of digitization. While the early Web had a focus on rationalizing work procedures and providing a repository for information, the Social Web enabled improvements of process quality and ‘flattened’ the pathway into the digital world. Facilitating this was improved usability, enhanced interactivity, and ubiquitous access, in particular via mobile platforms. Today Web-based technologies are the enabler for novel forms of customer experience, for disruptive business models, and for modes of

collaboration never dreamt of before. Interestingly, it is not the technical limitations of the Web hampering its continued growth today, instead it is moral and ethical dilemmas. Several such issues are touched upon in this book; deeper discussions are beyond our scope. Yet we hope that we have been able to produce a solid technology—as well as business-focused holistic view on the impact of the Web.

Life-long learning in the area of Information Technology is a big challenge especially for managers and executives. New developments emerge at an ever-increasing pace, and the areas in which this happens are both diverse, yet relevant for almost every business. This includes the likes of Web search, data mining and business intelligence to social media, cloud computing, big data and mobile devices. More so than ever before it is important that those who own and manage businesses, irrespective of size, are aware of these developments and the impact they may have. In an increasingly globally connected, fast-paced operating environment, many businesses can no longer choose whether to adopt technology; the issue is when and how to adopt. This book is intended as a guide for people who grew up with a background in business administration or a related area, but who through their career paths have reached a position where IT-related decisions have become their daily business. Our intention is to balance rules and approaches for strategy development and decision making, with a certain technical understanding of what happens “behind the curtain.”

Goals of the book:

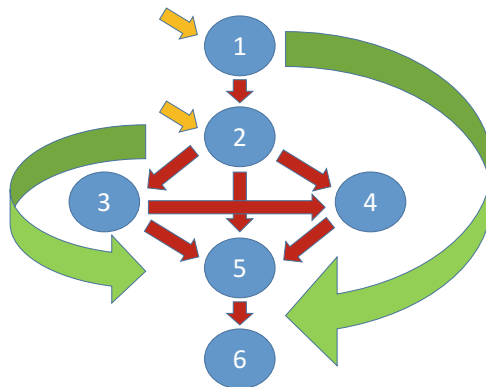
- Explore the vast array of new technologies that are available to businesses today.
- Familiarize the reader with ways to approach new technologies and best utilize them.
- Raise awareness of key recent technological advances of the likes of cloud computing, social media, mobile technologies, and big data technologies and how they might be used in the modern enterprise.
- Establish an understanding, from a managerial perspective, of the value of a range of contemporary technologies and an ability to articulate that to others in a non-technical way.
- Identify the important managerial considerations associated with contemporary technologies.
- Enable the reader to perform a SWOT analysis or even develop a strategy regarding the adoption of these technologies to a range of situations.

Sample of issues discussed in the book:

- Cloud adoption and security issues: What should businesses consider? How can they decide whether or not to move to the cloud? What would be a reasonable strategy? How to avoid cloud washing? What needs to be considered regarding security? How can my cloud applications and data be protected?

- Big data analytics: How to exploit big data scenarios for the benefit of my business? What is a reasonable Big Data architecture (beyond a data warehouse)?
- Social media data: How to handle the big data produced in and by social media today? How to distinguish relevant from irrelevant data? How to measure the value of a social media presence?
- Business Intelligence: Which adaptations need to be made to our BI processes?
- IT Decision Making and Strategy: Bring Your Own Device (BYOD) versus Company Owned, Personally Enabled (COPE).

We can see a variety of paths through the various chapters of this book, indicated in the following picture:



Obviously, the book can be read chronologically. A reader not so interested in the history of the Web might jump straight to Chap. 2. Chapters 3 and 4 may be read in either order, depending on the reader's interest. Progressing from Chap. 1 directly to Chap. 5 or 6, or even Chaps. 2–6 is also feasible. The book, in general, is non-technical; however, some readers might find aspects of Sects. 2.3, 3.4 and 3.6 present material using notation for which they may be unfamiliar. The overall essence of the book will not be lost if these sections are skipped.

A word about references: We use two ways of citing, the first of which occurs directly in the text where we want to point the reader to original work right at the position where we talk about a certain topic. Additionally, each chapter has a "Further Reading" section at the end, where we point to other literature containing useful information on what was discussed in the respective chapter. These sections typically do not repeat the references that appear already in the running text. A quick disclaimer: Many of our references are Web-based and so, given the obvious dynamic nature of the Web, we cannot guarantee their accuracy beyond date of publication.

We are grateful to various people who helped in the preparation of this book. Dr. Ute Masermann read chapter drafts and pointed out important mistakes or

inconsistencies. Sabine Schwarz prepared the figures, ensured they were presented accurately and uniform throughout the text. Lena Hertzfel checked all the references for us and corrected a number of citation errors.

Münster, Germany
Ettlingen, Germany
Hamilton, New Zealand
April 2017

Gottfried Vossen
Frank Schönthaler
Stuart Dillon

<http://www.springer.com/978-3-319-60160-1>

The Web at Graduation and Beyond
Business Impacts and Developments

Vossen, G.; Schönthaler, F.; Dillon, S.

2017, XIV, 292 p. 78 illus., 64 illus. in color., Hardcover

ISBN: 978-3-319-60160-1