

# Preface

Cloud computing is on everyone's lips: as an innovative technology, as the next generation of the Internet, as a fundamental transformation of the entire IT landscape, and as an auspicious opportunity to introduce new business ideas. But what is actually at the heart of this notion?

As a result of the multi-faceted viewpoints and the interests expressed by the various stakeholders, cloud computing is perceived as a rather fuzzy concept. It is our ambition to try and clear some of the haze surrounding the cloud computing concept and thus pave the way both for its successful application and for advanced research work and innovation.

In only a few months, we were able to compile the available material on cloud computing – which has become quite comprehensive in the meantime – and to condense it to fit into a smart book. But this could only succeed with the help of many colleagues from research organizations, but especially from the industry. They contributed a never-ending stream of new input and helped us in numerous discussions to develop a more differentiated picture of this exciting topic.

As is common with most disruptive technologies, the opinions on cloud computing diverge strongly in terms of acceptance and risk assessment. There are companies that cannot relate yet to the concept of using and deploying dynamic IT services, while others are at the cutting edge of this technology, some of them writing success stories that make headlines. This book will help our readers to study cloud computing rather unemotionally in the first place before they can enthusiastically take up its challenges and opportunities.

Due the fact that the discussion about cloud computing always has to consider both its technological and economic aspects, this book will be of major interest to a broad audience. It is equally intended for the students of our courses at the Karlsruhe Institute of Technology (KIT) and at other universities, for interested software engineers, and for future-oriented decision-makers. We trust that the technical information compiled here is rich and coherent. But this book should also be an interesting read for top executives and managers.

We would like to take the opportunity to thank everybody who contributed to the making this book. We received continuing and substantial support by the KIT focus COMMputation that helped to realize this book. Our special thanks go to Anja Langner and Bianca Pagliosa for their invaluable help in creating the illustrations, and to our families and friends for their understanding and support, and their patience when, once again, we sacrificed our leisure time for this book.

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