



Effective Collaboration in Dynamic Communities with Service-Oriented Architectures

Research Report 2007



CENTER FOR DIGITAL TECHNOLOGY & MANAGEMENT



**Effective Collaboration in Dynamic Communities
with Service-Oriented Architectures**

RESEARCH REPORT 2007

Effective Collaboration in Dynamic Communities with Service-Oriented Architectures

Editors: Ana Balevic, Bruno J. Bozionic, Bernhard Kirchmair, Nikolaus Konrad,
Philip Mayrhofer, Patrick Nepper, Uwe Sandner

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Center for Digital Technology and Management
Arcisstr. 21
80290 Munich
Germany

E-Mail: info@cdtm.de

Web: <http://www.cdtm.de>

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Preface

The ways people interact and collaborate have been rapidly changing in the last years, due to great advances in technology and the increasing impact of technology on our everyday lives. Globalization and the recent technological and social developments require increased business agility from companies, therefore placing high demands on the support for ad-hoc collaboration. To better support the requirements of collaborative software, we first need to understand the ways people work together as teams, groups and communities. In this book we examine different aspects of collaboration with a special focus on dynamic communities, and their implications for the social interaction patterns that need to be supported by future collaboration tools.

Research presented in this report represents integrated work of the research assistants and the dedicated interdisciplinary courses conducted at the Center for Digital Technology and Management (CDTM), a joint interdisciplinary institution of Technische Universität München (TUM) and Ludwig-Maximilians-Universität München (LMU), specialized in technology management education and high-tech research.

The “Effective Collaboration in Dynamic Communities with Service-Oriented Architectures” Research Report is structured in the three parts. The first part of the book is the research report on novel trends in the collaboration domain, which explores different collaboration scenarios and outlines emerging patterns of collaboration in dynamic virtual communities. It is concluded by an assessment of feasibility of supporting such scenarios using a Service-Oriented Architecture (SOA) approach and illustrated with a selected scenario from the field of agile product development. The second part of the book contains trend reports related to the developments triggered by the pervasive usage of the mobile technologies and the rising popularity of social-networking. The trend reports examine technology enablers and disablers and explore needs of different communities. Furthermore, the trend reports aim to identify new business opportunities and propose strategies for leveraging the recent developments. The book is concluded by three case studies that were developed and prototyped by CDTM students in order to illustrate the concepts outlined in the first chapters.

Last but not least, I would like to thank our industrial partners for their help and support during this project – especially Mr. Bruno J. Bozzonek, Mr. Thorsten Laux and their colleagues from Siemens Enterprise Communications GmbH & Co. KG who made this work possible, as well as my colleagues at CDTM with special thanks to Mr. Nikolaus Konrad for his invaluable help in editing this book.

Munich,
August 28, 2007

Ana Balevic

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Building on the strengths of two prestigious universities, CDTM provides highly qualified and ambitious students with an excellent academic education in the field of technology and management.

As a research institution, CDTM closely cooperates with the industry, concentrating on the TIME-sector (Telecommunication, Information Technology, Media, Entertainment).