

# ENABLING TECHNOLOGIES FOR MOBILE SERVICES

The MobiLife Book



Editor MIKA KLEMETTINEN

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# ENABLING TECHNOLOGIES FOR MOBILE SERVICES

**The MobiLife Book**

Editor

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John Wiley & Sons, Ltd



E2008001519

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West Sussex PO19 8SQ, England

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John Wiley & Sons Canada Ltd, 22 Worcester Road, Etobicoke, Ontario, Canada M9W 1L1

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

#### ***Library of Congress Cataloging-in-Publication Data***

Enabling technologies for mobile services : the MobiLife book / editor, Mika Klemettinen.  
p. cm.

Includes bibliographical references and index.

ISBN 978-0-470-51290-6

1. Mobile communication systems—Technological innovations. 2. Wireless communication systems—Technological innovations. I. Klemettinen, Mika.

TK6570.M6E53 2007

621.3845'6—dc22

2007014669

#### ***British Library Cataloguing in Publication Data***

A catalogue record for this book is available from the British Library

ISBN 978-0-470-51290-6 (HB)

Typeset in 10/12pt Times by Aptara, New Delhi, India

Printed and bound in Great Britain by Antony Rowe Ltd, Chippenham, England.

This book is printed on acid-free paper responsibly manufactured from sustainable forestry in which at least two trees are planted for each one used for paper production.

# **ENABLING TECHNOLOGIES FOR MOBILE SERVICES**

# Preface

In September 2004, IST Integrated Project MobiLife for mobile applications and services research was launched with a large consortium comprising manufacturers, operators and solution providers, SMEs and academia. The strategic goal of MobiLife was to bring advances in mobile applications and services within the reach of users in their everyday life by innovating and deploying new applications and services based on the evolving capabilities of the 3G systems and beyond. The research challenge of MobiLife was to address the multi-dimensional diversity in end-user devices, available networks, interaction modes, applications and services. To deal with this complexity and to reach its strategic goal, MobiLife researched with a user-centric approach context-awareness, privacy and trust, adaptation, semantic interoperability, and their embodiment in novel services and applications matching key use scenarios of everyday life. This book collects together main findings from the joint research that was concluded at the end of 2006.

The book is organised into 11 chapters and an Appendix.

- Chapter 1 gives an introduction to the book.
- Chapter 2 describes the User-Centred Design process behind the book approach.
- Chapter 3 gives an overview of a complete and coherent Mobile Services Architecture meeting the requirements of the new Mobile World.
- Chapter 4 introduces a Context Management Framework that is a key component in the Mobile Services Architecture, as well as other context awareness-related technologies.
- Chapter 5 presents new multimodal and personalisation technologies that are essential in providing natural and adapted user interaction in the novel mobile applications.
- Chapter 6 goes into privacy and trust issues; i.e. how to provide privacy-preserving and secure approaches for mobile applications. Additionally, novel group awareness solutions are introduced.
- Chapter 7 describes a number of reference applications that use the introduced Mobile Services Architecture and its technological components presented in Chapters 4–6.
- Chapter 8 defines both best practices and key learning from user and technical evaluation of the Mobile Service Architecture, the technological components and the reference applications.
- Chapter 9 analyses the marketplace dynamics and business model perspectives related to the new Mobile World.
- Chapter 10 complements the analyses from legal and regulatory perspectives.

- Chapter 11 is a short conclusion to the book.
- The Appendix contains the mobile scenarios used throughout the book.

This book is targeted at all people working with enabling technologies and service architectures either in companies or academia, and students studying applications/services, enabling technologies and service architectures at universities, but also to anyone interested in the general issues surrounding mobile technology and user research.

Also, as an extra resource, additional materials are available on the companion website at <http://www.wiley.com/go/klemettinen>.

# Acknowledgements

Thanks to all of those people who contributed to this book and to the research that made this book possible, with special thanks to all of the Chapter Editors and Section Editors for their efforts as well as to Andy Aftelak for the additional proofreading. Thanks also to the European Commission for the partial funding for the research carried out in the MobiLife project and to the Wiley team for practical assistance.

Finally, thanks to my wife Mimi with her patience and love while finalising this book, especially during the last weeks and days of her pregnancy for our first child, Minni.

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# Contents

<b>Preface</b>	<b>xi</b>
<b>Acknowledgements</b>	<b>xiii</b>
<b>Contributors</b>	<b>xv</b>
<b>List of Figures</b>	<b>xix</b>
<b>List of Tables</b>	<b>xxv</b>
<b>1 Introduction</b>	<b>1</b>
<i>Edited by Mika Klemettinen (Nokia, Finland)</i>	
1.1 Overview	1
1.2 Acknowledgements	5
References	5
<b>2 Users, Applications and Services, and User Centricity</b>	<b>7</b>
<i>Edited by Annakaisa Häyrynen (Elisa, Finland)</i>	
2.1 Mobility Landscape	8
2.1.1 Fixed, Mobile and IP Convergence	8
2.1.2 Mobility and Intelligent Environments	9
2.2 Collaborative User-centric Design Process	12
2.2.1 Introduction to User-centred Design	12
2.2.2 UCD Process: the Big Loop	14
2.3 UCD in Action	16
2.3.1 Identifying the Focus Group and Its Needs	17
2.3.2 From Scenarios to Requirements	21
2.3.3 From Requirements to Results	26
2.4 Conclusions	30
2.5 Acknowledgements	31
References	31

<b>3</b>	<b>Mobile Services Architecture</b>	<b>35</b>
	<i>Edited by Bernd Mrohs and Stephan Steglich (Fraunhofer FOKUS, Germany)</i>	
3.1	Requirements and Hurdles	36
3.1.1	General System Requirements	36
3.1.2	Major Hurdles in Service Provisioning	38
3.2	Mobile Services Reference Model	39
3.2.1	Specification Principles	39
3.2.2	Mobile Applications and Services	40
3.2.3	Service Building Blocks	41
3.3	Mobile Services Architecture: Functions and Interfaces	45
3.3.1	Context Awareness Function (CAF)	45
3.3.2	Privacy and Trust Function (PTF)	50
3.3.3	Personalisation Function (PF)	53
3.3.4	Group Awareness Function (GAF)	56
3.3.5	User Interface Adaptation Function (UIAF)	60
3.3.6	Service Provisioning Function (SPF)	63
3.3.7	Service Usage Function (SUF)	65
3.3.8	Operational Management Function (OMF)	66
3.4	Mobile Services Architecture: Functional Components Interworking	69
3.4.1	Service Deployment	69
3.4.2	Service Monitoring and Maintenance	70
3.4.3	Service Discovery	72
3.4.4	Proactive Service Provisioning	72
3.4.5	Multimodal Service Usage	74
3.4.6	Trusted Personalised, Context-aware Services	74
3.4.7	Joining a Group	74
3.5	Mapping to the IP Multimedia Subsystem (IMS)	79
3.5.1	Approach 1: Separated Realisation of Interworking	80
3.5.2	Approach 2: Tight Integration of the Mobile Services Architecture into the IMS System	82
3.5.3	Approach 3: A Flexible Combination	83
3.6	Service Lifecycle Management	87
3.7	Architecture Scalability	90
3.7.1	Scalability Performance Metrics	90
3.7.2	Scalability Components	91
3.7.3	Scalability Simulation	92
3.8	Conclusions	95
3.9	Acknowledgements	96
	References	96
<b>4</b>	<b>Context Awareness and Management</b>	<b>99</b>
	<i>Edited by Patrik Floréen (University of Helsinki, Finland) and Matthias Wagner (DoCoMo Euro-Labs, Germany)</i>	
4.1	Context Management Framework	100
4.1.1	Introduction	100

4.1.2	<i>Context Representation Framework</i>	102
4.1.3	<i>Context Ontologies</i>	104
4.1.4	<i>Context Providers and Context Consumers</i>	109
4.1.5	<i>Context Broker</i>	110
4.2	<i>Context Gathering and Simulation</i>	114
4.2.1	<i>Introduction</i>	114
4.2.2	<i>Data Gathering Tools</i>	115
4.2.3	<i>Simulation</i>	116
4.3	<i>Machine Learning for Context Awareness</i>	123
4.3.1	<i>Introduction</i>	123
4.3.2	<i>Interpretation</i>	124
4.3.3	<i>Context-dependent User Modelling</i>	128
4.4	<i>Proactive Service Provisioning</i>	133
4.4.1	<i>Introduction</i>	133
4.4.2	<i>Service Categorisation</i>	135
4.4.3	<i>Recommendation-based Service Discovery</i>	138
4.4.4	<i>Self-promoting Services</i>	142
4.5	<i>Conclusions</i>	145
4.6	<i>Acknowledgements</i>	145
	<i>References</i>	146
<b>5</b>	<b>Multimodality and Personalisation</b>	<b>153</b>
	<i>Edited by David Bonnefoy (Motorola SAS, France), Olaf Drögehorn (University of Kassel, Germany) and Ralf Kernchen (University of Surrey, UK)</i>	
5.1	<i>Multimodal Interfaces in Mobile Environments</i>	154
5.1.1	<i>Introduction</i>	155
5.1.2	<i>General Approach</i>	156
5.1.3	<i>Encapsulation of Physical Devices</i>	159
5.1.4	<i>Application Interface</i>	161
5.1.5	<i>Discovery of the User Environment: Device and Modality Description</i>	163
5.1.6	<i>Multimodal Output</i>	166
5.1.7	<i>Multimodal Input</i>	168
5.2	<i>Contextual Personalisation</i>	170
5.2.1	<i>Introduction</i>	170
5.2.2	<i>General Approach</i>	172
5.2.3	<i>Context Gathering and Interpretation</i>	174
5.2.4	<i>Individual Profile Management</i>	176
5.2.5	<i>Usage Record Provider</i>	181
5.2.6	<i>Recommendations for Personalisation</i>	181
5.3	<i>Conclusions</i>	182
5.4	<i>Acknowledgements</i>	183
	<i>References</i>	183

<b>6</b>	<b>Privacy, Trust and Group Communications</b>	<b>185</b>
	<i>Edited by Göran Schultz (LM Ericsson, Finland), Olivier Coutand (University of Kassel, Germany), Ronald van Eijk (Telematica Instituut, The Netherlands), Johan Hjelm (Ericsson AB, Sweden), Silke Holtmanns (Nokia, Finland), Markus Miettinen (Nokia, Finland) and Rinaldo Nani (Neos, Italy)</i>	
6.1	Group Communications	186
6.1.1	Technological Review of Groups	186
6.1.2	Mobile Groups: Advanced Social Relationships for the Next Generation of Mobile Users	188
6.1.3	The GAF: Group Awareness Function	193
6.2	Privacy and Trust	203
6.2.1	Basic Trust Architecture	203
6.2.2	The Trust Engine Concept	203
6.2.3	The Trust Engine Structure	206
6.2.4	Secure Initialisation of the Trust Engine	207
6.2.5	Privacy and Trust Policies	207
6.2.6	Group Policies and Policy Enforcement	209
6.2.7	Policy Resolution in Conflict Situations	211
6.2.8	Trust Management Systems	212
6.2.9	Protection and Auditing of the Trust System	213
6.3	Visualisation of User Choices Regarding Groups, Privacy and Trust	216
6.3.1	Setting the Scene	216
6.3.2	Privacy Display Widget	218
6.3.3	Remaining Challenges	221
6.4	Conclusions	223
6.5	Acknowledgements	223
	References	224
<b>7</b>	<b>Reference Applications</b>	<b>227</b>
	<i>Edited by Dario Melpignano (Neos, Italy)</i>	
7.1	Introduction	228
7.2	ContextWatcher	229
7.2.1	Description	229
7.2.2	ContextWatcher Setup	231
7.3	Personal Context Monitor	234
7.3.1	Background	234
7.3.2	The Application	234
7.3.3	Data Format	235
7.4	Proactive Service Portal	235
7.4.1	Situation-based Recommendation and Identification	239
7.4.2	Proximity-based Self-promotion of Services	239
7.4.3	Portal Service	240
7.5	Multimedia Infotainer	240
7.6	Wellness-aware Multimodal Gaming System	244

7.7	FamilyMap	248
7.7.1	<i>FamilyMap Initial Version</i>	249
7.7.2	<i>FamilyMap: Nokia 9500 Version</i>	250
7.7.3	<i>FamilyMap: Multimodal UI Version</i>	251
7.8	TimeGems	252
7.8.1	<i>Enabling Scenario</i>	253
7.8.2	<i>The Application</i>	253
7.9	MobiCar	256
7.9.1	<i>Enabling Scenario</i>	256
7.9.2	<i>The Application</i>	258
7.10	Conclusions	259
7.11	Acknowledgements	261
	References	261
<b>8</b>	<b>Trials and Evaluation for Acceptance</b>	<b>263</b>
	<i>Edited by Esko Kurvinen (Helsinki University of Technology, Finland), Renata Guarneri (Siemens, Italy) and Jukka T Salo (Nokia, Finland)</i>	
8.1	User and Technical Evaluation: A Case Study	264
8.2	User Evaluation	265
8.2.1	<i>Context Awareness, Personalisation and Adaptive Systems</i>	266
8.2.2	<i>Multimodality</i>	271
8.2.3	<i>Privacy and Trust</i>	273
8.2.4	<i>Group Management and Group Coordination</i>	275
8.2.5	<i>Remarks on the User Evaluation</i>	276
8.3	Technical Evaluation	280
8.3.1	<i>Related Work</i>	281
8.3.2	<i>Generic Approach and Methodology</i>	282
8.3.3	<i>Planning and Implementation of the Technical Evaluation</i>	283
8.3.4	<i>Evaluation Dimensions</i>	284
8.4	Conclusions	291
8.5	Acknowledgements	292
	References	293
<b>9</b>	<b>Marketplace Dynamics and Business Models Framework</b>	<b>295</b>
	<i>Edited by Ulla Killström (Elisa, Finland)</i>	
9.1	Introduction	296
9.2	Business Models Framework	298
9.2.1	<i>Framework for Modelling the Business</i>	298
9.2.2	<i>Generic Business Models</i>	310
9.3	Marketplace Dynamics and Business Models	322
9.3.1	<i>The Future Cannot Be Predicted</i>	322
9.3.2	<i>Marketplace Dynamics: Scenarios for the Future Marketplace</i>	322
9.4	The Impact of Marketplace Dynamics on Business Modelling	326
9.4.1	<i>Wind Tunnelling Approach</i>	327
9.4.2	<i>Challenges for the Technology-based Business Model in Two Extreme Scenarios</i>	327



9.4.3	<i>Challenges for the Advertising-based Model in Two Extreme Scenarios</i>	328
9.4.4	<i>Challenges for the Mobile-extension Model in Two Extreme Scenarios</i>	330
9.4.5	<i>Challenges for the Content-delivery Model in Two Extreme Scenarios</i>	332
9.4.6	<i>The Impact of Scenario Context on Business Modelling</i>	334
9.5	The Social Impact of Future Mobile Services	335
9.6	Conclusions	338
9.7	Acknowledgements	341
	References	341
<b>10</b>	<b>Legal and Regulatory Framework</b>	<b>343</b>
	<i>Edited by Olli Pitkänen (Helsinki Institute for Information Technology HIIT, Helsinki University of Technology and University of Helsinki)</i>	
10.1	Introduction	344
10.2	Competence	345
10.2.1	<i>Competence Defined</i>	345
10.2.2	<i>Legal Persons</i>	347
10.2.3	<i>Contractual Arrangements and Proxies</i>	348
10.2.4	<i>General Legal and Regulatory Framework</i>	351
10.3	General Legal and Regulatory Framework	353
10.3.1	<i>Introducing Special Legal Areas</i>	353
10.3.2	<i>Scenarios, Service Framework and Applications</i>	361
10.3.3	<i>Comparison with Other Scenarios</i>	371
10.3.4	<i>Special Legal Framework for the Scenarios</i>	375
10.4	Conclusions	378
10.5	Acknowledgements	379
	References	380
<b>11</b>	<b>Conclusions</b>	<b>383</b>
	<i>Edited by Mika Klemettinen (Nokia, Finland)</i>	
11.1	What this Book has Covered	383
11.2	Acknowledgements	385
	<b>Appendix</b>	<b>387</b>
	<b>Glossary</b>	<b>401</b>
	<b>Index</b>	<b>405</b>