The Art of Software Innovation

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Editors

The Art of Software Innovation

Eight Practice Areas to Inspire your Business

Springer

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ISBN 978-3-642-21048-8 e-ISBN 978-3-642-21049-5
DOI 10.1007/978-3-642-21049-5
Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2011935532

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Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

Have you ever wondered what innovation really means to your company, and, more specifically, how software influences your innovation capacity?

At Steria, our business is to develop software as a service for other companies – software that these companies use to drive their innovation, software that is developed using the latest technologies. For our company, it is important to understand where innovation meets risk and what the innovative aspects of our customer projects are.

For a company like Steria, it is not enough to invest in the best software engineering practices to improve the productivity of our software engineers. We must also leverage the potential of all our employees in the local and global organization. It is important that we constantly use all the innovation potential of our people, share new ideas, and explore new solutions and technologies. We must not only remain competitive due to our engineering practices but also by adopting leading-edge techniques and technologies and sharing in the benefits of innovation through our customer projects.

Together with 28 partners working in the ITEI (Information Technologies supporting the Execution of Innovation Projects) project, we gained some insights that led to the first edition of this book on software innovation. This book is not the result of a theoretical approach but the synthesis of many discussions and experiments carried out involving research institutes as well as industrial partners. This synthesis is certainly not the final point however, above all because the industrial partners that contributed to this work only cover part of the very broad spectrum of companies in which innovation is driven mainly by software.

Software innovation is multifaceted and the approaches used by companies can be very different. How do you understand which aspects of software innovation may be important to your company? To facilitate this thinking process, we propose a high-level classification of 'software companies' with their specific views on software innovation. We defined eight practice areas, 'arts', and 47 activities that your company can master to drive software innovation.

As a synthesis of all the discussions, experiments, 'arts' and activities, we propose a software innovation canvas to describe the most important aspects of software innovation – a software innovation canvas that may evolve from the input

of a broader range of companies that wants to contribute to the further evolution of this book.

For a different software company, some generic '"arts'" will be more relevant than the others.Some of these generic '"arts'" will be more relevant than others. For example, if you are driven by customer projects then the ideation part of innovation will play an different other role than if you develop out-of-the-box software products. This means that the '"the Art of Idea Harvesting'" may have another in importance to than the '"the Art of Focusing'" to your company.

Intrigued? In this book you will find details of what your company can do to understand, implement and sustain these '"arts'". Finally, I would like to end with some quotes from of different partners into the ITEI project that resulted in this book.

'*Software innovation is radically changing the way we communicate, interact, and organise ourselves today. What is now, will be different tomorrow. The eight software innovation practice areas in this book will stimulate your creative assets to better use.*'

Suvi Keinänen, Movial Creative Technologies Inc.

'*Software innovation is a major concern for IT service companies like Steria whose daily business no longer only consists of delivering innovative solutions to its customers but also of helping them on their journey towards innovation.*'

Pierre Paelinck, Steria

'*Metso's aim is to create value continuously by improving the quality, production and environmental aspects, and the cost-efficiency of its customers' processes. Innovation plays a key role in implementing these aims.*'

Antti Välimäki, Metso

'*Ever-accelerating technological change has moved innovation in the software sector past mere opportunity into the heart of the business strategy. We used to be amazed that young start-ups could challenge and unseat global IT giants in just a few years. Now we measure such shifts in mere months and speculate on how the current crop will stand up to next quarters' challengers. Innovation in software is about more than planning the next product release or service methodology update. We need to embrace perpetual agile business ecosystem incubation and adaptation to increase value creation.*'

Peter Stuer, Spikes

'*If you are a software-intensive company about to embark on the journey towards innovation mastery, this book is definitely the best guide you will find.*

This book is written by researchers and experienced practitioners who have been exploring and mapping the complex innovation landscape for years. This book brings it all together. It is an impressive collaborative effort to which I'm proud to have contributed.'

Wim Soens, Director of Innovation, Research and Development at CogniStreamer

Dr René Luyckx
CEO Steria Benelux

Acknowledgements

The critical source of information for this book was managers of software companies struggling with software innovation. Many of them are identified in the lists of authors and contributors for this book. We would like to thank all the companies that participated for sharing their software innovation experiences with us.

Without the significant contribution of the academia, this book would not exist. We would like to thank all the scientific contributors to this book.

We would especially like to thank ITEA 2 for its support and for making it possible to create this book in a European context.

The authors from Belgium would like to thank the Institute for the encouragement of Scientific Research and Innovation of Brussels (Innoviris), the Institute for the Promotion of Innovation by Science and Technology in Flanders (IWT) and the Brussels-Capital Region for the support it provided to this research and publication.

The authors from Finland would like to thank the Finnish Funding Agency for Technology and Innovation (TEKES).

The authors from Spain would like to thank the Ministerio de Industria, Turismo y Comercio (Plan Avanza).

Special thanks also go to Annukka Mäntyniemi who was one of the co-creators of the underlying research project that led to this book and Irja Kontio who put so much effort into the overall layout of this book.

ITEA 2

INFORMATION TECHNOLOGY FOR EUROPEAN ADVANCEMENT

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