BUILDING AN ENTERPRISE ARCHITECTURE PRACTICE

THE ENTERPRISE SERIES

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Building an Enterprise Architecture Practice

Tools, Tips, Best Practices, Ready-to-Use Insights

by

MARTIN VAN DEN BERG

and

MARLIES VAN STEENBERGEN

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ACCLAIM FOR BUILDING AN ENTERPRISE ARCHITECTURE PRACTICE

"*Enterprise Architecture has been an 'emerging' discipline for quite some time now, with a plethora of literature repeatedly providing mostly theoretical speculations. This book fills the urgent need of providing a pragmatic approach to converting those theories into a meaningful, viable, and useful architecture practice within an enterprise. In addition to addressing the key aspects of an architecture practice, the book also offers several valuable tools, such as the DYA Model and the Architecture Maturity Matrix, helping tailor and develop the most suitable architecture strategy for a given enterprise*."

Atul Bhatt, Ph.D.
Enterprise Architect in the financial services industry

"*DYA is THE practical framework for architects. It focuses on the process and deliverables of the architectural services. DYA gives suggestions how EA can be structured, but it's up to the organisation to choose any EA framework as base for DYA. This book gives, by way of examples and best practices, guidelines how to implement the architectural processes and outlines the services an architect should deliver.*
The philosophy DYA drums into the reader, 'just enough, just in time,' appeals to us. When addressing EA, don't grasp it in one bite. Do it the DYA way, bit by bit in a structured and controlled manner, just enough just in time. In other words, grow with Dynamic Enterprise Architecture."

Jan Carlsson
Chief Architect at the national board of student aid in Sweden, CSN

"*The previous book on DYA, Dynamic Enterprise Architecture: How to Make it Work, has been used with great success for several years now in the IT-bachelors program of the Hogeschool of Amsterdam. This new book is a worthy successor. It provides our students with methods to implement the architectural function in various*

kinds of companies. It gives them a broad vision on what is required to successfully implement an enterprise architecture practice."

Jan Hellings
Tutor Information Technology, Hogeschool van Amsterdam

"*This book is a must-read for Architects, as it describes in a very clear and pragmatic way how to successfully develop an agile Architecture which provides actual value to your business. Furthermore, it provides a practical and powerful approach to measuring and improving the maturity of Architecture thinking and working within you organization*."

Johan Nelis
Author of the book *Business Process Management, Practical Guidelines for Successful Implementation*

"*Martin van den Berg and Marlies van Steenbergen have created a practical handbook that can serve as an Enterprise Architecture foundation to help organisations in planning and organising their Enterprise Architecture efforts. Trying to understand the different elements described in this book, is one step, translating them to your own situation is another step. This book is a must read for organisations that have the ambition to take Enterprise Architecture serious and are trying to increase their EA professionalism*."

Jap Schekkerman B.Sc.
President & Thought Leader Institute For Enterprise Architecture Developments

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"*This book gives the reader a comprehensive holistic view on enterprise architecture and the importance of priorities in the architecture process. It shows very concrete steps and practical guidelines how to deploy an enterprise architecture and related practice in your organization*."

Gerard E.A. Smit
Executive IT Architect, Computer Services Industry, IBM Technical Expert Council

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FOREWORD

When I was six years old, I visited an old worker and his lifetime job was to craft beautiful nails for handmade wooden doors. His theory was that a good nail head must be made with just seven blows. But, he added, "There is no good worker without good tools." His words made such an impression that I've never forgotten them.

Enterprise architecture is still a young discipline; the most advanced enterprises and professionals still have less than 10 years of experience in it. Firms still need to make various compromises when building a "good-enough" architecture within their organization – i.e., one that does not cost too much nor delays project delivery, but maintains a manageable level of coherency and complexity despite organizational (or political) complexities. A survey published in 2006 reveals that 53% of EA stakeholders see EA documentation as hard to find and use, 42% think the documentation is not specific enough, and 34% believe that EA is not involved with the business.

Starting a new architecture initiative in an enterprise that does not have it or enhancing current EA practices that can't satisfy new objectives remains a challenge. Firms can make improvements in many ways; choosing the right combination of improvements is difficult.

One of the best practices collected from Forrester's EA group research is that bringing coherency to EA requires aligning three dimensions: organization, objectives, and EA scope. Bringing coherency involves a progressive approach of better understanding and sharing EA knowledge – not just within the EA group, but also with EA stakeholders like business relationship managers, operation and development groups, the CIO, and even IT procurement in some organizations.

This book provides a number of the "good tools" that will help architects make the right choice, demonstrate why these are the right choices, and find the right progression path. They will thus become the "good" – or at least a better – enterprise architect than the one without these tools, recognizing of course, that our architects are knowledge workers rather than manual ones! This book mainly describes the use of four tools and provides numerous tips and examples:

- The first of these EA tools is the DYA architecture framework. An EA framework is a graphical, abstract representation of EA content, such as the different models, a breakdown of the details, and sometimes the viewpoints. Enterprise architecture frameworks are well-known among architects: 55% use their own custom frameworks and a further 30% use Zachman. There are more than 20 EA frameworks available on the market, ranging from extremely simple to highly complex. Choosing a framework is a best practice that enables architects to represent elements like their EA coverage and the boundaries of the responsibilities they share with business units, and to illustrate their progress with simple indicators like red lights.

- The second EA tool described here is the SWOT Analysis Process, based on a survey of EA users. Architects often work in two ways: as firemen or as policemen. A good architect is continuously alternating between these roles and adding yet others, like insurer. He must find the right balance between thought and action, but just how to go about this is often difficult to establish. The SWOT Analysis Process is a unique tool because it assesses the view of those using the architecture and provides recommendations on how to move in the right direction and find a better balance between the fireman and policeman roles.

- The third of the EA tools proposed is the Architecture Maturity Matrix. This helps prioritize where you should put the emphasis, as it is impossible to do everything at once. The use of this relatively new type of EA tool – often called enterprise architecture assessments – is not yet a best practice, as a recent survey showed us. Currently, they are used mainly by the most advanced organizations, with many using them repeatedly to assess their next steps – thus demonstrating their value. As a result, this is the tool that most organizations should adopt next.

- Finally and most importantly – and what really makes the difference in the market – is the description of a methodology with examples. Even if these different tools can be used individually, the methodology links these different tools in a framework. It helps architects create their own irreplaceable experience of correctly using the tools by giving the reader some of the important "know-how", including how to tailor these tools to obtain a better nail – sorry, a better enterprise architecture! – for your enterprise.

There are a number of other tools in this book beyond those I've included in this foreword, but it would be far better for you to discover these by actually reading

the book. The appearance and developing usage of these tools and best practices demonstrate that the enterprise architect role is maturing. I hope that reading this book will make you a better-armed enterprise architect, with a wide range of good tools at your disposal.

Henry Peyret
Senior Analyst at Forrester Research
Forrester Leadership Board EA Council

PREFACE

In recent years, we have helped many organizations to work effectively with architecture. We have seen that adopting architectural practices takes effort, and can have any number of pitfalls. Yet the DYA Model offers a stable foundation on which to build. DYA, which stands for Dynamic Architecture, provides organizations with an effective way of dealing with architecture. We outlined the basis of DYA in a book originally published in Dutch in 2001, *DYA® : snelheid en samenhang in business- en ICT-architectuur*, revised and reissued in English in 2005 as *Dynamic Enterprise Architecture: How to Make It Work*. Since that original publication, DYA has been used successfully in a variety of organizations. In this new book we share the experiences and insights that we have gained. We hope that these insights will help you to enhance the professionalism and effectiveness of your organization's architectural practices.

The present book is a practical handbook. It contains many examples from our own experiences. These examples have been reviewed by an advisory board made up of fellow experts and professionals, who discussed previous drafts of this work at regular meetings in Kasteel Montfoort. We are extremely grateful to Stella van Dijk (Police), Dick Groeneveld (Netherlands Ministry of Justice), Frank Howldar (ING), Joop Jansen (Vitens), Marten Kramer (Fortis), Siem Lakeman (ABN AMRO), Peter van der Linden (Eneco), John Mulders (Netherlands Tax and Customs Administration), Olav Ruizendaal (Interpolis), Jan Truijens (Rabobank), Edi Vermaas (SNS Bank), Bert de Wals (ING), Marcel Wijnhorst (KPN), Erwin Winkel (BAT) and Hans Zwitzer (KLM). The Montfoort sessions were enormously inspiring to us.

In addition, we would like to thank Math Dicker (Open University in the Netherlands), Rogier Dijk (Rabobank), Bert Grootjans (Achmea), Henk Koning (freelance computer scientist) and Peter Odenhoven (Hogeschool van Amsterdam) for their extensive commentaries on our manuscript.

Several colleagues from our own organization, Sogeti Nederland BV, have also contributed to the production of this book. Careful and considered readings were provided by Rien Berkhout, Pieter van Binsbergen, David van Dijk, Gerard van Eerdt, Hans Fugers, Jan Hoogervorst, Roelf Houwing, Bart Krijgsman, Joost Luijpers, Bert Nederveen, Johan Nelis, Bert Noorman, Ivo van Ouwerkerk, Allan Reid, Ria van Rijn, Martin van Run, Joep Sars, Gé Schellen, Ron

Sintemaartensdijk, Daniël Smits and Ruud Zwiers. Thanks for all your comments and suggestions. We also want to thank Erik Kieboom and Stefan Langerveld for their contributions on "thinking about change in five different colors."

We would like to thank three of our colleagues in particular: Klaas Brongers, in his own engaging manner, helped us with the publication of this book; Jack van der Linde was the perfect host and chairman for the advisory board; and Jeroen Versteeg made it possible for us to write this book. Thanks for all your assistance and support!

Writing this book has been a great pleasure, and we hope that you enjoy reading it as much. We also wish you a great deal of success in applying these insights to your own practices. We would be pleased to hear your observations and experiences: they can be emailed to dya@sogeti.nl.

July 2006

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