BOOK REVIEW

Exploring IBM SOA Technology & Practice

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Exploring IBM SOA Technology & Practice
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The emergence of web services technology and SOA has introduced several issues and challenges one has to be aware of in early stages of SOA projects. This book attempts to discuss these challenges from IBM perspective thus giving the reader an important insight into IBM architectural style. The book clearly aims at business leaders and high level executives rather than developers and architects. Clarity and simplicity in explaining the cornerstones of SOA without the burden of technicalities is the important feature of this book. During the review, we consulted some other authors who naturally are more cross-vendor oriented to gain some insight of the commonly accepted perspectives of SOA (see Thomas Erl (2005); Thomas Erl (2006)).

The first chapters help to scope the topic by repeating what can be found in many other SOA papers and books. The first chapter provides important recommendation for the business: start with the pilot project and establish a Center of Excellence as a main tool for applying SOA governance. Chapter 2 provides introduction to IBM four methodologies for applying SOA in an organization: SOA entry points, Service Integration maturity Model, Service Oriented Modelling Architecture and Component Business Modelling.

Chapter three provides the explanation of orchestration and role of Enterprise Service Bus (ESB) as an
important part of SOA realization in the IBM world. The simple explanation of composite services as the ability to implement a complex business processes which are centrally controlled but runs outside the application logic would appeal to many business executives. However, showing composite services and orchestration as the solution obtainable with minimal effort may lead to underestimating the actual cost of development.

A new methodology for SOA governance is explained as critical component for SOA success in an organisation. SOA governance is widely defined as a chain of responsibilities, measurements, policies, control mechanism and communications applied to planning of key IT decisions within the context of components lifecycle and business processes (Fortaleza, Ceara (2008)). Applications of SOA impact entire enterprise and therefore, the governance is so important for smooth management of lifecycle of all components. It is definitely the point often forgotten by SOA architects and implementers.

Reusability is often misunderstood concept. The author makes valid point in defining the reusable service as unification of code reuse and SOA being the key goal of integration. He also maintains that service orientations make this goal easier than seen in previous approaches by taking a full advantage of context-free APIs and interfaces as implemented with SOA and WSDL. He also advocates the current practice of wrappers or creating the adapters for legacy COBOL application provides a vehicle for using these applications over a web service client. As this is current band-aid for implementing SOA in enterprise, these practices should be discussed further to clarify why and when to use them.

Connectivity is important entry point for SOA as it provides location and consumer transparency. The value of ESB is seen in its capability to mediate mismatch between the consumers and providers as well as ability to do service registry lookup. For example, slight mismatch such as the difference between data formats can be bridged by transformation. Meanwhile, the registry keeps track of service providers, their metadata and status. We can look at the ESB and its registry as similar facility as UDDI with somewhat localized reach within the company domain. In order to fully appreciate and utilize the services, the connectivity has to match the providers’ accessibility requirements. The book explains very briefly what type of issues the designer may encounter however it does not provide broader guidance.

As we all know, SOA is based firmly on implementation of standards in its effort to provide a framework for integration of different technologies. SOA enables to run heterogeneous applications on multiple platforms where routing, transformation and conversion are facilitated by ESB. For ESB to connect service requestors and service providers, each service interface has to
be implemented in ESB (or at least look alike functionality enabled).

The book also provides very high level overview of those IBM products which support development of SOA based applications. It is an impressive list of products covering every stage of development from the conception up to the deployment and monitoring. As an architect and developer, I worked with many of these products, particularly ESB, Rational Application Developer, and modelling tools. Clear description of the purpose and functionality of these products would provide the starting point for any executive who wishes to understand the principles and have meaningful conversation with the company SOA architects as well as with the development managers. Additional very good material can be found in (Ueli Wahli; Lee Ackerman; Alessandro Di Bari, Gregory Hodgkinson; Anthony Kesterton; Laura Olson; Bertrand Portier (2007)).

REFERENCES


Prior joining NextDigital as a senior consultant, Dr. Polgar worked as a lecturer at Monash University in Melbourne, Australia where she was teaching subjects focusing on web services, SOA and portal design and implementation in postgraduate courses at the Faculty of Information Technology. Her research interests include web services, SOA and portal applications. She has also extensive industry experience in various roles ranging from software development to management and consulting positions. She holds master degree in electrical engineering from VUT Brno (Czech Republic) and PhD from RMIT Melbourne.