



7 SOA PRACTICES
to UNLOCK BUSINESS VALUE

Seven SOA Practices to Unlock Business Value

Manmohan Gupta
Director Product Marketing, Software AG

July, 2011

CONTENTS

EXECUTIVE SUMMARY	3
SOA PRACTICE #1: USE SOA TO INTEGRATE MULTIPLE CHANNELS	4
SOA PRACTICE #2: COMPOSE APPLICATIONS FROM SOA SERVICES	4
SOA PRACTICE #3: USE SOA AS FOUNDATION FOR BUSINESS PROCESS AUTOMATION	5
SOA PRACTICE #4: USE A SERVICE PORTFOLIO TO PRIORITIZE SERVICES FOR YOUR BUSINESS	5
SOA PRACTICE #5: INVEST IN GOVERNANCE EARLY	6
SOA PRACTICE #6: USE SOA TO GAIN BETTER UNDERSTANDING OF YOUR BUSINESS	6
SOA PRACTICE #7: USE SOA TO GIVE YOU A HEAD START IN ADOPTING CLOUD	7
CONCLUSION	8
NEXT STEPS	8

EXECUTIVE SUMMARY

Adoption of SOA continues to expand at a rapid pace (“among global 2000 enterprises, SOA penetration runs at 82%”, according to Forrester Research¹). SOA is generally understood to be an architecture that follows certain design principles and its best-known benefit is that it encourages reuse of IT assets. But that in and of itself is not interesting to companies, nor is it the only reason why so many businesses are implementing SOA every year.

The fact is that companies are increasingly using SOA to gain competitive business advantage. Like networks and application servers, SOA has become an essential part of successful businesses across a variety of industries, enabling them to build an infrastructure that delivers business capabilities as services. Over the last several years, the IT professionals at these businesses have gained valuable insights into the specific approaches and the practices that have helped them employ SOA to boost business value—and now those insights are shared with you.

Distilled down to seven essential SOA practices, the following list enables IT professionals to tightly align SOA investments with their organization’s business priorities. Using these practices can help with driving competitive advantage and adding measurable business value...and that’s a sure way for IT pros to win recognition and ongoing support within their companies.

These seven SOA practices help drive competitive advantage and add measurable business value.

¹ “SOA Adoption 2010: Still Important, Still Strong” (Forrester Research, Inc. March 2011)



SOA PRACTICE #1: USE SOA TO INTEGRATE MULTIPLE CHANNELS

Companies over time have built an application for each business channel they needed to support. Be it an application to take orders over the phone or the one to support e-commerce or an application for smartphones. In the back-end, however, all these applications leverage the same set of enterprise wide databases and core systems. Creating separate, discrete applications for each new channel does not scale well. Applications require individual updates when common regulatory changes occur, when new capabilities can't be incorporated easily or when applications need to be written for a new channel. Using SOA to build a platform of shared services, forming one central back-end that supports all your business channels is vastly more efficient.

Using SOA to build a platform of shared services, forming one central back-end that supports all your business channels is vastly more efficient.

With this approach, adding new devices or users just means building a new custom front-end, and ensuring regulatory compliance merely requires changing the appropriate services that all applications share. This provides tangible business benefits, ensuring consistency and improving customer service—just what a major passenger rail service wanted when it sought to integrate its extensive mix of distribution and sales channels.

A \$4 billion organization with 500 stations across North America, the firm sells thousands of tickets every day through a variety of channels – at the station, on the train, over the phone and on their website. It built a foundation of enterprise business services that targets all their external channels while spanning the entire IT landscape in the back-end – from legacy systems to external partners such as travel agencies. With over 80 percent reuse of these services, the company now delivers a consistent experience through all its channels, boosting customer satisfaction while cutting time to market for introducing new channels.

SOA PRACTICE #2: COMPOSE APPLICATIONS FROM SOA SERVICES

The ability to create composite applications by using services as building blocks is a common reason why companies invest in SOA. These building blocks may come from a variety of sources: services enabled legacy systems, service interfaces to established applications, entirely new services or even services from partners. Various business applications can then be composed from these pre-existing services, effectively insulating them from the complexity of the underlying systems. As a result, SOA becomes a core enabler that drives innovation with lower time to value and increases return on existing assets. One of the world's largest distributors of electronic components found this approach to building applications invaluable to their business.

The company needed to rationalize a glut of disparate applications and platforms (obtained through a series of acquisitions) that lacked interoperability. The architecture team started with a goal to represent common business processes across their suppliers. Then they mapped out current capabilities determining inconsistencies and gaps along the way. Developers created services to fill in the missing pieces while making sure that each service is reusable elsewhere in order to spread out costs. They also built a few common services such as translation services, security services and directory services. Using these services as building blocks, the company assembled mission critical applications such as the integrated quote process, supply chain management application and an e-commerce application.



The results were compelling. A 45 percent reduction in development time for IT projects that used SOA vs. those that didn't. In addition to that, they are now able to integrate new acquisitions in just 90 days or less.

SOA PRACTICE #3: USE SOA AS FOUNDATION FOR BUSINESS PROCESS AUTOMATION

Consider automating your business processes by using business services to model each of the process steps. For instance, take the Order-to-Cash Process. The first step in the process is to do a product inquiry. Let's assume there is a service that knew exactly how to do a product inquiry. Then the next step in the process is to reserve inventory. Again let's assume there's a service that knows exactly how to reserve inventory for a given product. And so on, until for each step of the process, we have a service that implements the process step. SOA allows us to build these services by using an Enterprise Service Bus (ESB) to enable the core and/or legacy systems into technical services and orchestrate these lower-level services into business services. By isolating processes from the underlying complexity, business services give you the ability to automate new processes quickly, while also making the resulting processes more amenable to rapid changes as business needs evolve. That was the goal of a large cable provider in the US (with over six million customers) when it used SOA to reinvent its business process helping cut onsite service costs and increase customer satisfaction.

The company built an automated work order management system by using process models to determine service scope and definition. The resulting SOA services integrated a variety of legacy applications to implement the process steps. As a result, the company saved 10 minutes per day for each of its 3000+ field technicians which is the equivalent of over \$4 million in annual productivity gains.

SOA PRACTICE #4: USE A SERVICE PORTFOLIO TO PRIORITIZE SERVICES FOR YOUR BUSINESS

Adopting a portfolio approach is key to building a coherent, rational collection of business services for your company. Avoid creating services on an as-needed, ad hoc basis and amassing them in a library for future use. This typically yields a jumbled assortment of disconnected and overlapping services that few people have the discipline to search.

Instead, begin by reviewing your organization's business process domains and defining the capabilities that will optimally support these domains. Then as you undertake a new project, you'll implement some of those capabilities as services. With each subsequent project, you will re-use some services you've already implemented while building some new ones. Eventually, new projects may not require any new services to be built. One of France's largest telcos used this planned portfolio approach when it set about increasing its agility and responsiveness.

By isolating processes from the underlying complexity, business services allow new processes to be automated quickly and be more flexible.

Without SOA Governance, business critical projects can fail.

The company identified the capabilities they needed to support each of their primary business process domains such as service assurance, customer support and billing. These capabilities were then mapped to actual services. Today they have close to 7000 reusable services across 10 business domains. As a result of greater alignment with the business, the company is now able to invest with increased confidence and has a better handle on their costs. The portfolio of services is also the basis for the company to move ahead with tighter process integration with its partners.

SOA PRACTICE #5: INVEST IN GOVERNANCE EARLY

Of all the SOA practices discussed above, committing to SOA governance is the most critical one for you to develop—it's the wellspring from which all other SOA benefits flow. A Forrester Research survey² demonstrates that "SOA users are struggling enough with achieving the benefits that they are holding off on expanding its use" and "SOA governance is the key to addressing these struggles." Without SOA Governance, business critical projects can fail. Projects can get delayed due to lack of needed services. Investments can get wasted with IT reinventing the wheel every time. Unexpected service disruptions results when shared services aren't properly resourced. Back in 2006, a multinational bank in Turkey realized the importance of governance early when they embarked on a strategic business transformation.

The goal of this global bank was to focus on local customers, stay compliant with local regulations and double their branches in next five years. They determined that without governance they could not achieve the IT transformation that should happen for the business transformation they needed. For the bank, that meant first having the right organizational structure, right products and vendors and right staff with the right skills. Then with SOA governance processes and tools in place managing all assets, they were able to answer questions such as: Which services and processes we have? Which applications are effected, when we modify a service? What is the scope of the systems we manage? Who is responsible for what?

Governance has allowed them to achieve close to 50% reuse of their services. No less than 200,000 transactions are handled by these services daily. And more importantly without governance it would have been difficult, if not impossible to successfully transform their business and meet their goals.

SOA PRACTICE #6: USE SOA TO GAIN BETTER UNDERSTANDING OF YOUR BUSINESS

As noted earlier, SOA's core purpose is to help companies build a foundation of business capabilities as services. Simply put, these business services represent real business transactions that are flowing through the business. It follows that you can use SOA to better understand your business.

² "Survey Results Show SOA Governance Improves SOA Benefit Realization" (Forrester Research, Inc. September 2009)



By placing data “probes” on their business services, companies can collect detailed information and gain real-time visibility into their business. For example, a company may want to know how many times per day, week, or month a product inquiry was made, or how often shipments were scheduled within an hour of orders being received. Metrics collected by such business monitoring can be used to create a dashboard, giving organizations deeper understanding and timely information as the basis for making business and investment decisions.

SOA PRACTICE #7: USE SOA TO GIVE YOU A HEAD START IN ADOPTING CLOUD

Your investment in SOA can pay multiple dividends. Not only does an SOA drive greater business value for your company, but also the knowledge you gain from it accelerates your ability to adopt cloud offerings. That’s because cloud computing platforms follow the same design principles—service orientation and loose coupling—as SOA. Thus offerings based on cloud can be treated as a set of sharable services that can be used to build, modify or extend business applications and processes.

An SOA based on a portfolio of services can help you identify which services can be transitioned to the cloud. Further, with an infrastructure to govern service usage, you can determine the security and scalability requirements of these cloud services. And if your company wanted to provide cloud services to partners and customers, an SOA based approach of building services helps ensure meeting functional as well as quality of service requirements. All in all, SOA helps companies take a more strategic approach to adopting cloud and reduces risk.

An SOA based on a portfolio of services can help you identify which services can be transitioned to the cloud.



Learn the latest secrets of unlocking business value with SOA. Visit softwareag.com/soarockstar

The Software AG SOA solution isn't just a suite of coherent, best-of-breed technology—that includes the #1 market-leading Enterprise Services Bus (ESB) and CentraSite™—but also provides guidance including reference content, proven methodology and expertise.

CONCLUSION

Like all successful business technologies, SOA doesn't exist for its own sake but is a means to an end—increasing business value and gaining competitive business advantage. Taking advantage of the powerful tools SOA offers to attain those goals can sometimes be daunting, but drawing upon the proven seven SOA practices described above can make things easier.

Companies frequently monitor how well they achieve their goals by tracking Key Performance Indicators (KPIs). KPIs comprise of a broad variety of measurable criteria such as profitability, cost reduction and market share. Similar KPIs are also important for IT professionals because they enable them to objectively demonstrate the business value of their SOA projects. Using KPIs to measure SOA return on investment allows IT architects to disprove the erroneous perception that IT is a cost center and not a driver of business value. In doing so, IT professionals are finally garnering acclaim within their companies for the key contributions they make to the bottom line.

Many IT professionals have gained attention in their respective companies for the significant and measurable business benefits that SOA can deliver. Seven SOA practices shared above can help in delivering business value for your company...and achieving the professional recognition you deserve.

NEXT STEPS

Ready to get started? Review the seven SOA practices above and decide which one is most relevant to your company's specific challenges. Then launch a 3-6 months long pilot and measure the benefits to the business. Based on the experience gained, request funding and roll out the practice enterprise wide.

To learn more about how Software AG can help you with not only technology but also guidance, visit softwareag.com/soa

TO FIND THE SOFTWARE AG OFFICE NEAREST YOU,
PLEASE VISIT WWW.SOFTWAREAG.COM

Take the next step to get there – faster.

ABOUT SOFTWARE AG

Software AG is the global leader in Business Process Excellence. Our 40 years of innovation include the invention of the first high-performance transactional database, Adabas; the first business process analysis platform, ARIS; and the first B2B server and SOA-based integration platform, webMethods.

We offer our customers end-to-end Business Process Management (BPM) solutions delivering low Total-Cost-of-Ownership and high ease of use. Our industry-leading brands, ARIS, webMethods, Adabas, Natural, CentraSite and IDS Scheer Consulting, represent a unique portfolio encompassing: process strategy, design, integration and control; SOA-based integration and data management; process-driven SAP implementation; and strategic process consulting and services.

Software AG - Get There Faster

© 2011 Software AG. All rights reserved. Software AG and all Software AG products are either trademarks or registered trademarks of Software AG. Other product and company names mentioned herein may be the trademarks of their respective owners.