DECISION NOTE

Separating Hype From Reality in Service-Oriented Architectures

Decision Point:	Technology, strategies and investments in Service-Oriented Architecture (SOA) market
The Bottom Line:	Service-Oriented Architecture (SOA) is being touted by some major platform and systems players and is a core go-to-market strategy for a host of emerging software vendors who sell across multiple industries. To the naked eye it's hard to tell whether SOA is for real or merely another shining piece of vendor-driven acronym slideware. In reality it can bring newer enabling technologies to bear on pain points that have afflicted most industries for a decade. You're involved in "SOA" whether you know it or not, and action is required.
Who Should Read:	Service providers: executives, particularly VP OSS and above; NOC administrator; service provisioning leads Corporate executives: CIO, VP IT Software vendors: CEO, CTO, VP product management, competitive intelligence Systems integrators: partner level and their direct reports

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Title Separating Hype From Reality in Service-Oriented Architectures
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Service-Oriented Architecture (SOA) describes the delivery of every application or transaction as a service, seamlessly across company and network/system boundaries, and with the infusion of some recent enabling technologies it gives the appearance of being the next operations support systems (OSS) killer app.

SOA [pronounced by aficionados as *"so-ah,"* not "S-O-A"] contains components and interconnections designed to enhance interoperability and location transparency. In virtually every instance it is based on existing systems rather than requiring a "forklift upgrade," to best leverage current software and hardware platforms, DBs and applications, not to mention the developers and other professionals who operate the systems.

The cornerstone of today's SOA deployment, Web Services, can enable business applications to share common transport protocols, interfaces and transaction models—then enable shared use of those applications not only within a single company's castle walls but across its customers, partners, suppliers and other associated entities.

This one-two punch appears to have the wherewithal to revolutionize the way your company does business: faster service deployment, shorter time-to-revenue and lower TCO. The hoped-for result: a quick-on-its-feet organization that can move fast to keep up with the pace of business and technology.

However…Is SOA more hype than substance? Is it Holy Grail or slideware acronym vaporware? How do you know SOA when you see it? Here's what you need to know and do about SOA.

TECHNOLOGY BACKGROUND AND ANALYSIS

So What's a SOA?

One can hardly traverse some corners of the software market today without stepping in "SOA." Companies large and small, from global giants such as IBM, BEA and TIBCO to non-household-names such as Systinet to the company at CORBA's core (Iona), are building solutions and in some cases a company's *raison d'etre* around Service-Oriented Architecture. But what is SOA and what can it mean to your business?

The CBDI Forum defines Service-Oriented Architecture (SOA) as the policies, practices, frameworks and systems that enable application functionality to be provided and consumed as sets of services, published at a granularity relevant to the service consumer. Services are the ways in which a consumer's needs or wants are satisfied per an implied or explicit contract including a service agreement. Services can be invoked, published and discovered and are abstracted away from the implementation using a single, standards-based interface.

We support that definition with a few wrinkles. SOA also:

- Leverages existing networks and systems (including across multiple organizations) to deliver applications as services

- Takes the long-standing notion of "using a single platform to deliver the full spectrum of communications services" to the next level

Simple, right? Let's roll out SOA across your IT landscape! Not so fast. First let's have a look at how we got to where we are today.

Complexity, Redundancy and Merger Mania Drive the Need for SOA

Oracle's September 12, 2005, $5.8B acquisition of Siebel (a light snack after it devoured PeopleSoft in a $10.5B hostile takeover in December 2004) is just one more example of the wave of M&A-driven consolidation in many industries over the past five years. These deals may look sensational in the boardroom but wreak havoc with every IT operation involved, resulting in redundant and/or non-reusable applications and in many cases tens of thousands of new "colleagues" dislocated on non-integrated IT islands. These factors can paralyze organizations post-merger, rendering even the most basic day-to-day business operations difficult and making development of new products or services seem insurmountable.

Even if the Merger Monster hasn't visited your doorstep, time and complexity have been marching on. Over the past 30 years or so, IT systems have grown exponentially, leaving companies to handle increasingly complex software architectures. The IT requirements of the core business continue to expand well beyond what the existing architectures can handle.

The industry has responded in various ways, the most beneficial of which include the development of platform-neutral solutions—"can't we all just get along?"—such as Java and XML, and in a lowest-level pedestrian way, the now-ubiquitous Acrobat Portable Document Format (PDF).

SOA Enabler: Web Services

Yet the technology that really opened the door to SOA is Web Services. "Web services" describes a system designed to support interoperable machine-to-machine interaction over the web using a defined interface. Other systems interact with the web service via a prescribed protocol—today most commonly the Simple Object Access Protocol (SOAP) developed by Microsoft and endorsed by the World Wide Web Consortium (3WC) or "upstart" protocol Representational State Transfer (REST)—over HTTP. The service requests and responses are executed via XML messages based on either 3WC's Web Services Description Language (WSDL) or simply HTML., regardless of encoding (although today it is most commonly Multipurpose Internet Messaging Extensions, or MIME). At the heart of the system is Business Process Execution Language (BPEL), which simplifies mapping between business processes and the software implementation.

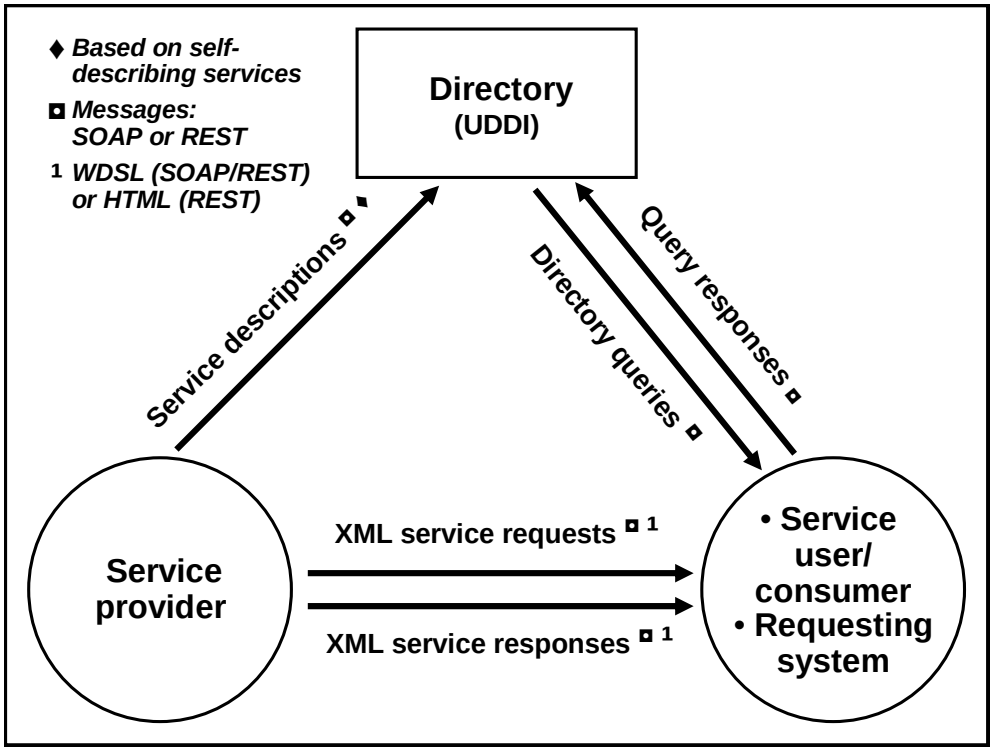
SOAP vs. REST has become a UNIX-vs.-Linux-style donnybrook raging in the Web Services community over these competing protocols. A future Yankee Group Decision Note will provide a full analysis and our recommendations for how you should position your organization's technology accordingly.

Implementing SOA using Web Services lets you build applications within a more powerful, flexible programming model that simultaneously reduces development costs and TCO, thus slashing implementation risk. Where SOA is being implemented today, it is built on a Web Services foundation that bleeds SOA's DNA:

- Platform independence – a function of the overall SOA architecture and protocol-neutral XML messaging
- Loosely-coupled, on demand services
- Self-describing services
- Discovery – enabled by a platform-neutral registry, most commonly based on Universal Description, Discovery and Integration (UDDI)
- Formal separation between service provider and service consumer via the interface

Exhibit SOA-1 shows a simplified bird's-eye view of the Web Services framework that is the foundation for SOA.

Exhibit SOA-1: Web Services framework



What is a Service?

If SOA is all about providing for the seamless, platform-independent delivery of all applications and transactions as services, then under the SOA framework, what constitutes a service? When a consumer interacts with a SOA to check prices, generate shopping lists, adds an item to a virtual cart, places an electronic order to trigger a stock purchase, fills out an online form or accesses a Microsoft Office program via an ASP, those are examples of what the SOA community defines as business services. When the system performs a database lookup or user verification to enable any of these transactions, that's (unsurprisingly) a system service. All services are independent and operate as "black boxes," invisible to external access points and users.

SOA Platform Precepts

1. SOA must comprise a virtual platform that is equally relevant (and available) to any other platform and provides full separation of services from the implementation.
2. In the SOA universe, interfaces rule; they must be universally available to all providers and consumers and may be invoked regardless of:

- o whether they are local (within the system) or remote (external)
- o which protocol or infrastructure components are required to make the connection
- o whether the requested service is "local" inside the very same application, on a different system inside the same company, or "remote" on a customer/partner/supplier's system.

3. Requesting messages must be descriptive (not instructive) because the service provider is responsible for fulfilling the request, not the user or requesting system. Message schema and syntax must be tightly specified to ensure that service providers can understand user requests. This is most analogous to service level agreements (SLAs) in the carrier environment, specifying what the user can expect down to how many "nines" of availability to avoid conflicts (and major financial givebacks by the service provider) later.

4. The system must be extensible to accommodate rapid changes without full-scale rewrites to ensure that the company and its business partners can quickly react to (or anticipate) changes in business and technology environments.
5. The system must empower users/consumers (or requesting systems) to discover multiple service providers who can currently provide the desired service.
6. Open standards, simple protocols, no single point of failure
7. Lightweight endpoints that allow the network (not the application developer) to handle security, monitoring and policy

Exhibit SOA-2 under RECOMMENDATIONS translates these general platform precepts into specific technology components that are the building blocks of SOA. Vendors must supply some or all of these to get in the SOA game, and this exhibit groups them by functional areas to begin establishing areas of core competency addressable by various vendor types.

TECHNOLOGY TRAJECTORY

SOA is in its infancy. At YE2003, only about 100 companies worldwide had implemented SOA in any form (enterprise-wide or confined to specific internal departments). Yet its potential is massive: The Yankee Group found that 75% of the 437 enterprises we surveyed in the U.S. are already planning large SOA investments. It is also true that Web Services, and the SOA market itself, are supported by the pervasiveness of HTTP connections around the globe.

Yet the size of the worldwide SOA market is still nebulous, at best. While other industry observers are predicting either the SOA market itself or overall service infrastructure spending to top $6B by 2008 and $10B by the end of this decade—doubtless driven by major SOA investments and product rollouts by some of the market's largest players—we, despite the positive but non-specific results of our most recent SOA survey mentioned above, are taking a more pragmatic view.

One place from where we can draw solid inferences is the SRM market, which we have forecast at $2.5B-3.0B by YE2005. SRM is focused on inventory and service delivery/management spending by communications service providers and the largest corporate and U.S. federal government entities (such as Fidelity Investments, DoD and U.S. Postal Service), while SOA has broad applicability across various functional areas and to virtually every business entity above the SOHO/"Mom & Pop shop" level. So SOA's potential is massive. Yet it is not yet solidly quantifiable, and we are not prepared to make a market call at this juncture.

SOA Ground Troops: Vendor Moves and Deployments

In a market that's still murky, picking winners is murkier still. The company that looks like the early SOA market leader is ***Sonic***, with hundreds of customers for Sonic ESB® and its SOA Suite, an ESB-based distributed services platform. Sonic ESB delivers various capabilities including service orchestration and XML-based operational data management. The vendor's impressive lineup of service provider customers includes Cingular Wireless, Charter Communications, KPN Telecom, Lucent, Mobilcom Gmbh, Nortel, NTT DoCoMo, SBC, Siemens, Sprint/Nextel PCS and Telecom Italia. It complements this with customers in the retail, manufacturing and diversified services, as well as a list that reads like a who's who of the financial services industry: Citibank, Credit Suisse First Boston, Deutsche Bank, E*Trade, Fidelity Investments, Goldman Sachs, Prudential, State Street Bank and Swiss Re.

Cape Clear appears to be Sonic's nearest competitor with 200 customers for its Enterprise Service Bus (ESB) including marquee names like AOL, AT&T, SKY (British Sky Broadcasting), J.P. Morgan Chase, Northrop Grumman, Sony, Swisscom and Vodafone. In the absence of companywide SOA announcements from any of these giants, we can reasonably conclude that many of these deployments are confined to certain regions or functional groups inside a company. Yet even if all Cape Clear had were SOA footholds with these major entities—and if not all of them qualify as "SOA"—it would still be laudable progress given the embryonic state of the market.

Systinet is shipping the broadest all-SOA product line we've seen to date: Systinet modules include Registry, Governance Interoperability Framework, Systinet Server, and Blizzard, a SOA platform that at its core has an extensible repository that models, stores and manages SOA information. The vendor counts industry giants Alcatel, Boeing, Caterpillar, DT, Entergy, Ericsson, France Telecom, Kodak, Motorola and Visa among its long and growing customer list.

San Diego-based ***TeamSOA,*** working with partners including TIBCO, WebMethods and BEA, has rolled out SOA solutions in the past 18 months for clients including Science Applications International Corporation (SAIC) and PriceWaterhouseCoopers (PWC). In 1999 the firm developed a product called VelociGenX that facilitated the creation of doc-literal, WS-I2 compliant, WSDL-defined Web Services, accessible from any client supporting SOAP over HTTP, and in 2001 it launched another product, Network Director, to solve SOA challenges around configuration management (an expected side effect of loosely coupled environments). Extending or replacing the Manager Fabric functionality is a matter of adding Web Services, which can be built using any toolkit that supports the creation of doc-style, SOAP-over-HTTP Web Services.

Four years ago Granite Systems joined The Yankee Group in coining the term Service Resource Management (SRM) to reflect the need for not only traditional physical configuration but also logical configuration, software configuration management and the ability to map services to all areas of configuration. Now ***Telcordia,*** perpetually forced to defend what competitors deride as “embedded/legacy systems” developed during the Bellcore era, is building on the SRM vision to begin delivering what looks a lot like the largest SOA deployment in the telecom OSS market at Telecom Italia, code-named the UNICA project. Telcordia is creating a new middle tier of Granite product modules to execute a surround strategy around long-standing Bellcore legacy systems, replacing 20 mainframe-based systems and inserting a TIBCO bus to share data and establish workflow across the enterprise. Real-world value is accruing to TI in the form of $20-30M annual savings and putting the wraps on a projected eight-year project in about five years.

BEA has been focusing its business around SOA for some time now and its status as one of the market’s marquee names in middleware makes it a force to be reckoned with here. Its SOA-focused product line includes the WebLogic Platform, AquaLogic Data Services Platform and WebLogic Application Adapters. Recognizing that services and business processes are as important in SOA implementations as raw technology, BEA also offers its Service-Oriented Architecture Readiness Self-Assessment tool that enables enterprises to assess the maturity of their systems in regard to implementing SOA. BEA has won a respectable lineup of customers for its SOA solutions including AirNet, Covad, Telecom Italia Mobile and Virgin Mobile USA.

TIBCO is building on its EAI/messaging bus success to launch a SOA platform. Code-named Project Matrix, the platform extends TIBCO's enterprise backbone software to provide a standards-based way of deploying business services as part of SOA. TIBCO couples SOA with what it terms Event-Driven Architecture (EDA) in a unified architectural framework to achieve true business agility and future-proof the business. Qualcomm has moved toward its enterprise SOA vision with TIBCO, moving from traditional integration and process development to build out new services.

IBM clearly views grid computing and SOA as a launching pad for its On Demand Computing initiative, in fact now specifying that IBM On Demand customers move to SOA frameworks. The company introduced the WebSphere Business Integration Server Foundation, with built-in BPEL support, and IBM Global Services offers IBM Assessments for Services Oriented Architectures to help SOA customers measure their progress. IBM’s long history as an outsourcer and its acquisition of the company that was one of the top three ASPs (Corio Inc.) has prepared it well for the virtual computing/resource-sharing world SOA represents. The giant is biding its time until the SOA market reaches critical mass and then it will strike.

Iona, best known thus far in the OSS market for putting the ORB in CORBA, has now deployed its Artix extensible enterprise service bus (ESB) for a handful of customers including 3 Italy, Deutsche Post and Raymond James & Associates. Artix’s extensibility is due to its plug-in architecture, and it helps companies leverage and extend existing systems.

In mid-2005 ***Cisco*** introduced products from its new AON (Application-Oriented Networking) group and partnerships with leading middleware vendors SAP and IBM. The product rollouts included an AON blade for the Catalyst 6500 Series switch to perform XML message processing, an AON edge device that manages wireless data and AON management software.

TECHNOLOGY STRENGTHS

SOA offers all sorts of benefits over the patchwork of non-integrated systems—IT environments that wouldn’t know a “service” if it walked up and said hello—that still prevent most companies from achieving their potential. Attaining the future promised by SOA is a no-brainer “must have.” In short, SOA has the power to change the world—albeit in a more behind-the-scenes fashion—every bit as much as the Internet has to date.

Specifically, SOA can empower your organization to:

- Leverage existing system investments and resources, both internal and external, by unlocking their value and distributing it across the enterprise—all without requiring full-scale system rewrites.
- Treat your IT Infrastructure as a commodity, accommodating virtually any component from any supplier into the SOA fabric. Accessing services is not dependent on any particular hardware or software platform—and with SOA, neither are you.
- Manage ongoing incremental implementations and asset migration to deliver incremental ROI.

SOA is well-positioned in its own right, and another global technology macro movement portends good things for SOA: grid computing.

From a pure number-crunching perspective, grid computing unleashes high volumes of millions of instructions per second (MIPS) on complex problems. Yet the key concept that makes grid computing more compelling than it might be to, for example, simply deploy an armada of supercomputers to tackle such tasks, is that grid computing accesses applications from servers across multiple organizations to quickly harness more computing power than available in a single organization, and thus can outperform traditional offerings at fraction of cost.

Sound familiar? Grid computing embodies the CORBA-like quality of drawing computing power (and information) from multiple sources—with the bonus that there's no single point of failure because neither data nor IT horsepower reside on a single machine. You employ hardware or software partitioning, time-sharing or QoS factors to virtualize all distributed computing resources and deploy them when and where they're needed within the grid.

Thus SOA is essentially grid computing—virtual resource management—with a Web Services front end.

That's all well and good, but isn't grid computing just another techno-fantasy…as a growing number of industry observers feel is the case with SOA? One guidepost might be Project MegaGrid, launched by Oracle, Dell, EMC and Intel in December 2004. The goal is threefold:

- Harness computing power (MIPS) and data across company and network borders
- Create automated, on-demand service provisioning
- Deliver on the one hand higher service levels and management capacity and on the other, lower IT opex/capex

TECHNOLOGY CHALLENGES

One need look no further than the U.S. wireless services market to see how effortlessly self-interest and power politics can overcome superior technology. Vendor-funded TDMA-CDMA-GSM warfare retarded U.S. wireless development and forced consumers to choose which lesser-of-evils corner to inhabit, and only over the past two years has the market enjoyed anything resembling real choice. Yet that's old hat: the newest wireless political "innovation" is in Wi-Fi, where the most promising technology—the one that delivers the optimal combination of range and speed (up to 240Mbps)—is in the process of being discarded (for the second time in successive years) in today's 802.11n standards wrangling.

In a similar vein, SOA offers a world of promise but also carries techno-political baggage that could kill SOA in its infancy. After years of hype, the various industry interest groups are debating architecture, components and terminology associated with SOA. One clash that continues in the center ring is SOAP vs. REST, with SOAP proponents claiming "their" protocol is more robust and essential to more complex applications and the REST camp arguing that its simple XML-over-HTTP approach is the way to go.

In truth, when you cut through the fog of vendor hype, at its most basic level "SOA" can distill down to the separation of business functions into routines, and the "breakthrough" is that functions can now reside on different machines while still being called as easily as if they were on a single server. Hardly as world-shaking as the breathless proclamations flying around the industry.

THE BOTTOM LINE

Some people hear "SOA" and think they've been transported to nirvana: this is the one they've been waiting for and it will cure all ills, perhaps line the streets with gold. Then there are the healthy skeptics among us who have a sneaking suspicion we've seen this all before. That "SOA" in some ways seems to be a shiny new label affixed to a

repackaged set of best practices of open systems, platform-neutral design, readily-extensible code and consumer-friendly choice (equal access?) to multiple service providers that we've been striving to deliver all along.

Others have heard "SOA" so often over the past 12-24 months their eyes glaze over, because on first blush it looks like another wave of vendor-driven hype designed to move a lot of units, reality and long-term (or even short-term) value be damned. From ISDN to VoDSL to the latest multimillion-dollar OSS "moon shot" that gets mothballed in a year two, we've been hurt before. Fool me once, shame on you; fool me twice…

Here's why we believe if you can tune out the pushy sales type who's dogging you across the lot and go ahead and kick the tires, you'll probably decide SOA is a vehicle that can take you where you need to go.

First, there's a lot of truth to "We've seen this before." And guess what: the reason we're seeing it again is because we collectively haven't come to terms with our IT infrastructure, but more importantly that our collective goal ought to be to deliver the optimal combination of services when, where and how they're needed. SOA provides a structured pathway to get there.

SOA focuses the mind wonderfully. SOA is not merely marketing slideware followed by product vaporware, although you'll undoubtedly experience vendors that make it so. SOA forces programmers to think in service-centric terms from the outset of a project. To look outside themselves and think about how what they're creating is going to fit into the big picture, not just in empty platitudes spoken at rah-rah project kickoff meetings but in the actual structure of the project. If like me you've heard from your technical teams things like, "That other vendor has a better GUI, and customers may not see it but our product is really better," this service-directed development aspect of SOA alone is worth the price of admission.

If you work for a service provider or one of the corporate or government entities to whom SOA is (or soon will be) marketed, consider what SOA can do for your organization: transform it into a lean, mean fighting machine that just might survive the harsh economic winds that are going to sweep the planet at will during our lifetimes.

If you work for a vendor, particularly an OSS company, you remember how the telecom market consolidated and the OSS market imploded a few short years ago. And although your eyes are telling you you've seen welcome signs of a mini-revival over the past 12 months, your ears can't help hearing the drumbeat of consolidation. In your heart of hearts, you know the number of places to sell your wares in the communications jungle is steadily dwindling, and top management is whispering that after another 12 months it's hard to see where the company is going to be finding its next meal. Where can you turn? SOA. If the companies who are implementing it do it well, everybody's going to want one:

- Service providers got the message long ago that services are where it's at, and they love anything that doesn't require them to blow up their existing world and build a new one. SOA scores on both counts.
- Companies in every other industry sector need this like water, and with the majors like IBM and Cisco now in the game you'll see a lot more ink hit a lot more SOA contracts. If you're an OSS vendor who took a run at the non-communications markets around 2000 but gave up because the average revenue per sale put a frown on your finance VP's face, this is your second (and maybe last) shot at becoming a multi-market success. Take it.

If you're a software vendor who's been unable to crack the telecom market, take a gander at the wireline, wireless and cable blue-chips on the customer lists of companies who before now may never have been mentioned in the same sentence as "OSS": Sonic, Cape Clear and Systinet. Learn it. Live it.

ENTERPRISE RECOMMENDATIONS

- If your company is considered a small-to-medium business or above, and if business model relies on resource- and information-sharing with partners, customers, suppliers or any other interested (and authorized) party…and if you haven't gotten serious about SOA already: get serious now.
- Shop carefully for the vendor or vendors who can help you craft a SOA strategy and translate it in short order into tangible, measurable results. SOA is new to many and certainly not a time-tested framework, but figure you know at least as much as they do and don't entrust your business fortunes to any vendor who hangs up its SOA shingle. Grill them to be sure they understand what "SOA" really means at ground level, and that their SOA principles agree with yours. (Both should align around the principles outlined throughout this Yankee Group Decision Note or someone's being missed.)

- Moving to SOA doesn't automatically mean changing vendors. If you current suppliers are listed in this Decision Note, you've got a leg up on deploying SOA. If not, find out where they stand on SOA. Then either walk or work with them, accordingly.
- Remember that a core precept of SOA is reuse of existing systems and components. If anyone presents you with a master plan that rips out more than 40% of your existing network/systems resources, wish them a nice day and move on to the next supplier.
- Bring your people into the process from day one. "Day one" means the first day you start exploring how to adopt SOA in your organization, not the day of the first day a vendor comes calling about SOA. "Your people" means not just a cozy coffee klatch of department heads but your entire IT team. Be firm that this is the direction you're going, but get their input. They are the ones who can make or break implementing SOA.

Exhibit SOA-2: SOA Platform Components/Functions Checklist

Components/Functions	*Potential providers* | *Other factors*
Asset management	SRM/NRM vendors SAN management vendors
Host (service provider) environment: - Service publishing - Self-description Consumer/user environment: - Enterprise Service Bus (ESB) - Service discovery - Consumer/Subscriber management Middleware Web Services protocols Development environment Deployment & versioning Integration and assembly environment	Software infrastructure/platform providers Middleware/bus and toolkit providers Vendors with expertise in these areas: - CRM/Order management - B2B and B2C - Interconnection and (former CLEC-style) service provider trading partner solutions - SRM/NRM, CRM or billing vendors with strong product & services catalog offerings
Security infrastructure Identity management	Billing verification/authorization vendors
Testing-monitoring-measurement Service level management (SLM)	Every vendor with these capabilities: - Test & measurement - Performance management - SLA/SLM
SOA/Web Services/XML-ready network equipment	Network equipment manufacturers

VENDOR RECOMMENDATIONS

- If you're not currently offering SOA solutions, do an honest assessment this week of how far away you are and what it will take to get there. As soon as your internal product roadmap for moving toward SOA is set and signed off on by all appropriate parties, begin modifying your messaging to incorporate SOA. Do not try to remake your company in SOA's image overnight! Announce what you're doing but be candid about availability.
- Meet with your sales force to assess the mood around SOA at your key accounts. Some of them have probably been asking about it, and if they're not asking you there's going to be a tendency to let sleeping dogs lie. Don't fall for it; if they're not talking to you about SOA they're probably talking with your competitors. Pretending the elephant is not in the room may feel safer today but backfire tomorrow.

- SOA offers a renewed opportunity to move into other verticals; your sales force now has a ready-made reason to call. If you do not currently sell into the corporate or government markets, recruit sharp enterprise software people—in sales, engineering and product management—who currently do. (Vice versa if you don't currently sell into the telecom-wireless-cable markets.) If your financial position leaves no room for staff additions, make changes. You need to set a 12-month organizational roadmap for becoming competitive in the SOA market, or competitive as a SOA player in the markets you do not currently serve, and the train is leaving the station today.
- Build alliances with companies who are already establishing strong positions in the SOA market. Much like "end-to-end OSS," no one company will have all the technology (or answers) in SOA, and chances are good you can provide other pieces of the puzzle. This Decision Note identifies today's strongest vendors in the SOA space and specifies functional areas that should be an apt fit for your company depending on its core competencies.

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