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Five Hot Technologies For Enterprise Architects
SOA Lives Up To Expectations With Hot Technologies Paving The Way

This is the second document in the "2008 EA Survey" series.

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EXECUTIVE SUMMARY

Forrester surveyed 140 enterprise architects, IT planners, and IT strategists on their take on service-oriented architecture (SOA) and 19 software infrastructure technologies. The outcome? Enterprise architects see SOA accelerating, and five supporting technologies have gained strategic relevance — while all others have lost strategic relevance.

SERVICE-ORIENTED ARCHITECTURE HAS CLEARLY BECOME MAINSTREAM

In the fourth quarter of 2008, Forrester surveyed enterprise architects, IT planners, and IT strategists to get their take on key enterprise architecture (EA) practice questions. Respondents were based in North America, Europe, and a few further geographies.[1] The survey also covered architecture and strategy related to SOA and software infrastructure technologies.

SOA Adoption Continues To Be Strong . . .

To help enterprises and in particular enterprise architecture groups compare their perception of SOA and the status of their SOA initiatives and/or related activities with those of the participants of the October 2008 Multicountry Enterprise Architecture Online Survey, Forrester asked participating firms about the state of their SOA initiatives, the development of their SOA usage, and related topics. We found that:

- **Only a small minority is not working on SOA at all.** Only 7% of the respondents told us that they don't have an SOA initiative and don't plan to have one (see Figure 1-1). Seventy-nine percent of the participants either have an SOA initiative in some state of progress or are introducing SOA without a dedicated initiative. Fourteen percent of the responding architects are located between these two camps: While they don't have an SOA initiative yet, they are currently in the planning phase.[2]

- **The clear majority of firms will increase their SOA usage.** Three-quarters of the respondents expect that their firm will increase its use of SOA in terms of the number of applications using SOA, the number of developers working on SOA, or the money spent on SOA (see Figure 1-2). Fifteen percent of the respondents are a bit more conservative, indicating that SOA usage will remain the same. Only a very small group (1%) expects to decrease SOA usage.

- **SOA has lived up to most expectations for the majority of firms.** Among survey respondents with a dedicated SOA initiative and more than a third of their application landscape service-enabled, 90% told Forrester that SOA has lived up to their expectations, albeit in different shades (see Figure 1-3). Most notably, a quarter of respondents said that SOA has fully lived up to their expectations. Only 2% of this group stated that SOA has not at all lived up to expectations.
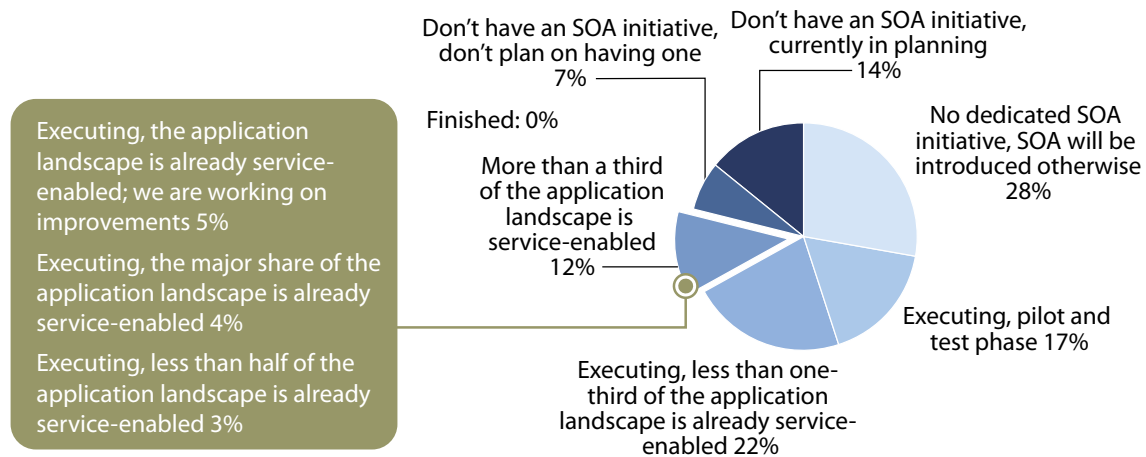
. . . But Top Strategic Technologies Have Started To Change

A key group of five technologies see the highest marks for their expected strategic relevance in 18 to 24 months. However, the five technologies that will increase the most in strategic relevance between now and 18 to 24 months from now are not entirely the same group as those that will see the highest marks. What does this mean on a more detailed level?

- **2010 will see five very strategic technologies.** SOA life-cycle management, SOA service registry and repository, enterprise service buses, and both integration- centric and human-centric business process management suites (BPMSes) will be the five key strategic technologies 18 to 24 months from now: More than 30% of survey participants expect these architecture building blocks to be strategic for their firm in this timeframe (see Figure 1-4). Taken together, the two BPMS technologies garner 51% of the "strategic votes" in 18 to 24 months, making BPMS second only to SOA life-cycle management.

- **Five winners dominate the picture in increasing relevance.** The survey participants only expect five technologies to *increase* in strategic relevance between Q4 2008 and the next 18 to 24 months: SOA life-cycle management; SOA service registry, repository; integration-centric BPMS (IC-BPMS); human-centric BPMS (HC-BPMS); and personalization (see Figure 1-5).

- **Five technologies will lose the most relevance over the next 12 to 24 months.** While most technology categories will lose strategic relevance within the next one and a half to two years, five technologies will do worse than the others. Data integration, database management systems, Web servers, application servers, and security all see more than a 30-percentage-point reduction in votes when comparing their future strategic relevance to their strategic relevance today.

Figure 1 Strategic Technologies Support Maturing And Broadening SOA Initiatives

1-1 **"What would best describe the current state of your SOA initiative?"**

Don't have an SOA initiative, don't plan on having one 7%

Don't have an SOA initiative, currently in planning 14%

Finished: 0%

No dedicated SOA initiative, SOA will be introduced otherwise 28%

More than a third of the application landscape is service-enabled 12%

Executing, the application landscape is already service-enabled; we are working on improvements 5%

Executing, the major share of the application landscape is already service-enabled 4%

Executing, less than half of the application landscape is already service-enabled 3%

Executing, less than one-third of the application landscape is already service-enabled 22%

Executing, pilot and test phase 17%

Base: 137 enterprise architects, IT planners, and IT strategists

1-2 **"How do you expect your SOA usage to change in the next 12 to 24 months?"***

Don't know 9%

Decrease overall 1%

Remain the same 15%

Increase overall 75%
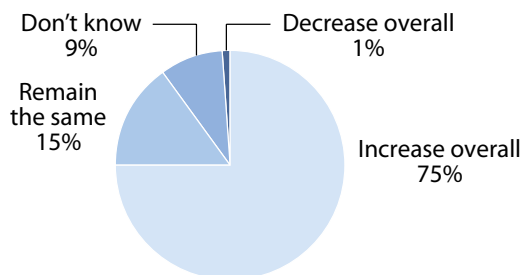
*Examples of SOA usage include: the number of applications using SOA, the number of developers working on SOA, and money spent on SOA.

Base: 137 enterprise architects, IT planners, and IT strategists

1-3 **"Has SOA lived up to your expectations?"**

There have been major flaws 8%

Not at all 2%

Yes 26%
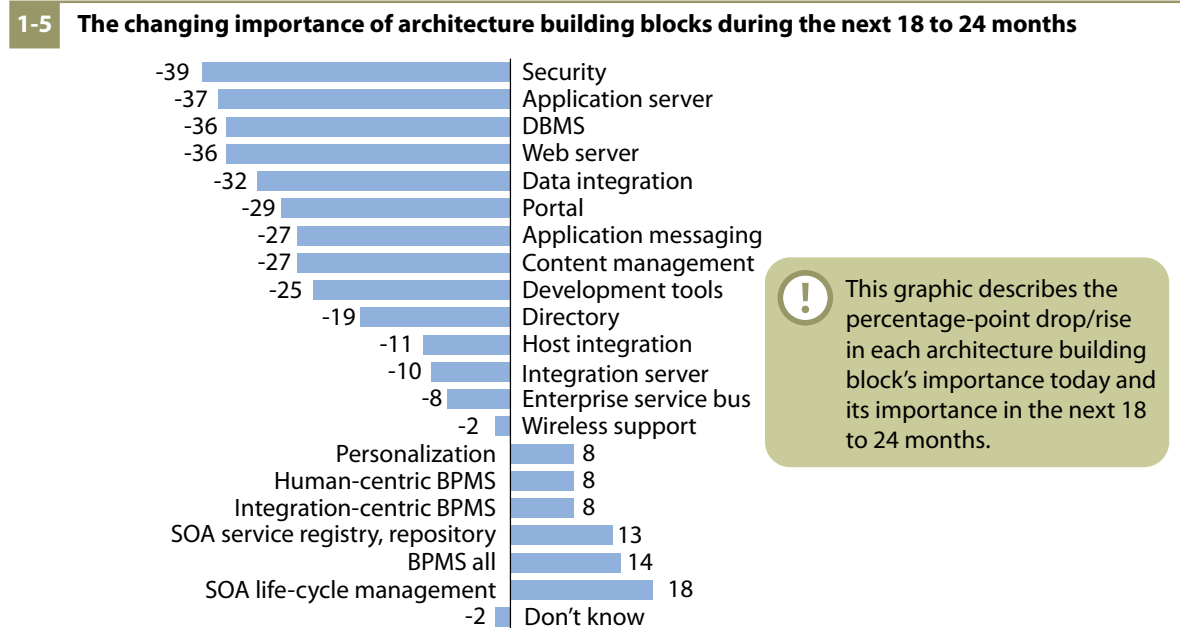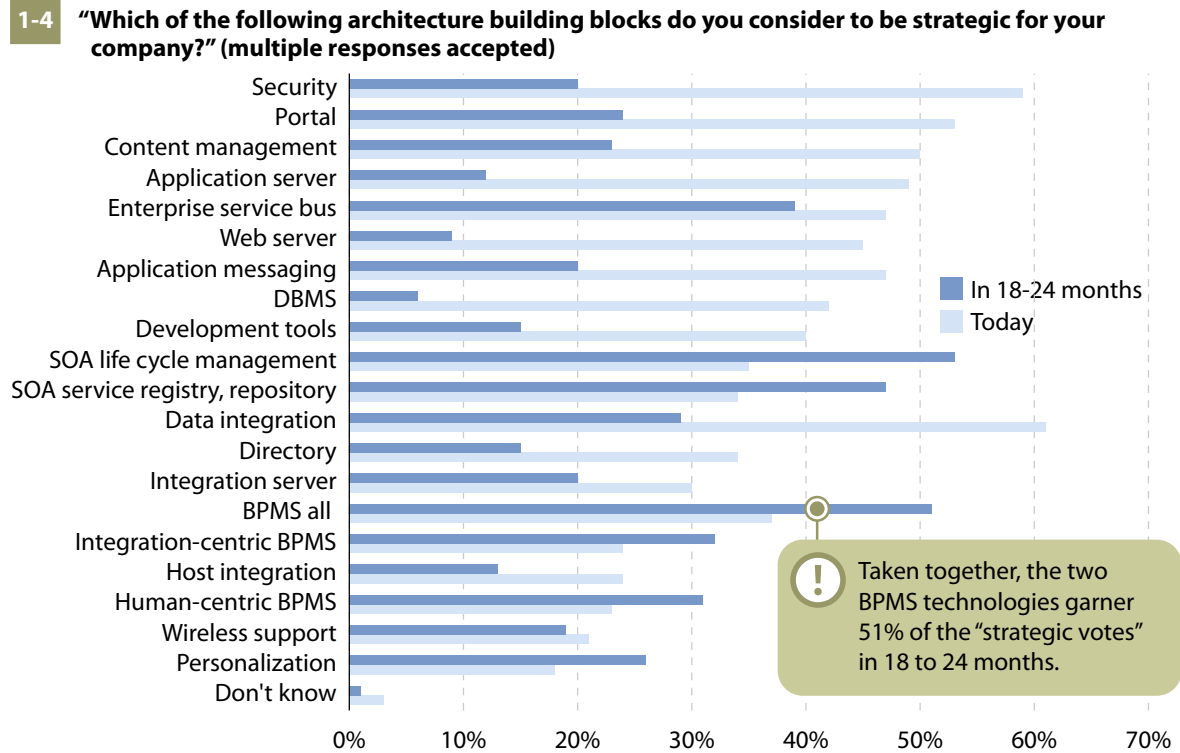
To a certain degree 64%
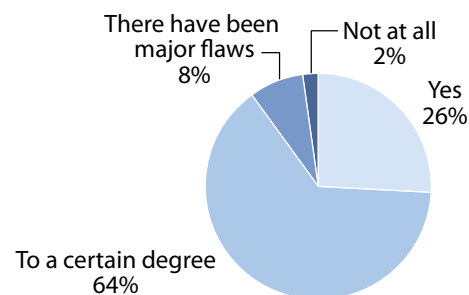
Base: 50 enterprise architects, IT planners, and IT strategists who use SOA

Source: October 2008 Multicountry Enterprise Architecture Online Survey

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Source: Forrester Research, Inc.

Figure 1 Strategic Technologies Support Maturing And Broadening SOA Initiatives (Cont.)

1-4 **"Which of the following architecture building blocks do you consider to be strategic for your company?" (multiple responses accepted)**

Security
Portal
Content management
Application server
Enterprise service bus
Web server
Application messaging
DBMS
Development tools
SOA life cycle management
SOA service registry, repository
Data integration
Directory
Integration server
BPMS all
Integration-centric BPMS
Host integration
Human-centric BPMS
Wireless support
Personalization
Don't know

In 18-24 months
Today

0%   10%   20%   30%   40%   50%   60%   70%

Taken together, the two BPMS technologies garner 51% of the "strategic votes" in 18 to 24 months.

1-5 **The changing importance of architecture building blocks during the next 18 to 24 months**

-39 Security
-37 Application server
-36 DBMS
-36 Web server
-32 Data integration
-29 Portal
-27 Application messaging
-27 Content management
-25 Development tools
-19 Directory
-11 Host integration
-10 Integration server
-8 Enterprise service bus
-2 Wireless support
Personalization 8
Human-centric BPMS 8
Integration-centric BPMS 8
SOA service registry, repository 13
BPMS all 14
SOA life-cycle management 18
-2 Don't know

This graphic describes the percentage-point drop/rise in each architecture building block's importance today and its importance in the next 18 to 24 months.

Base: 137 enterprise architects, IT strategists, and IT planners
Source: October 2008 Multicountry Enterprise Architecture Online Survey

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WHAT IT MEANS

SOA BROADENS ITS FOOTPRINT — EVEN AFTER THE BEGINNING OF THE CRISIS

This survey of EA groups in North America, Europe, and a few further geographies took place after the beginning of the current economic crisis. While the impact of this crisis was then less visible than it is today, survey results indicate that SOA will continue to become a broadly established IT foundational element for firms in various industries while at the same time becoming more mature. The two key findings of the survey are that:

- **Firms are basically satisfied with what SOA delivers.** Three-quarters of the responding firms expect that their SOA usage will increase — in spite of the ongoing crisis — and an even greater majority of firms like the outcome of the SOA initiatives they have undertaken. This is the good news for SOA proponents in difficult economic times. However, it's important to consider two additional points. First, this survey's respondents were enterprise architects or related roles, and businesspeople may answer the same questions differently — in particular because many business persons are not interested in architecture but in delivered value. Second, while only 10% of the respondents reported dissatisfaction with SOA, even some enterprise architects with more-successful SOA initiatives will see challenges to prove business value. The reason? Many SOA initiatives' goals are not fully aligned with EA metrics and EA governance.[3] Consequently, enterprise architects need to view and measure SOA from a business perspective to drive longer-term success.

- **SOA tooling will become more mature.** More-experienced firms and EA groups have rightly learned that they need more than "traditional" SOA building blocks to create a basis for enduring SOA success.[4] They have long considered SOA registries and repositories as well as SOA life-cycle management tools as necessary to establish a firm foundation for longer-term SOA success. Today, our survey points to these two "survey newcomer" categories as the technologies that will become the most strategic in the next 18 to 24 months — which also indicates a potential wave of investment in these areas. At the same time, while building blocks such as data integration and enterprise services buses remain strategically important, they will lose strategic relevance over the timeline.[5] This indicates that IT organizations and their architects are starting to view some more-mature SOA-related technologies as less strategic and even a commodity.

ENDNOTES

[1] The first part of the "2008 EA Survey" series offers a more in-depth look into the survey demographics. See the March 11, 2009, "Enterprise Architects Are Not Proving Their Value" report.

[2] The EA audience for this survey reported even stronger SOA penetration than respondents reported in previous Forrester surveys. See the March 11, 2008, "SOA Adoption: Many Firms Got Started In 2007" report.

3   EA governance is not always aligned with strategic goals. See the March 11, 2009, "Enterprise Architects Are Not Proving Their Value" report.

4   Building an effective service-oriented architecture (SOA) platform requires cohesive integration of both new product categories, such as SOA repositories and enterprise service buses (ESBs), and existing product categories. See the May 16, 2008, "How To Build Your SOA Platform" report.

5   For example, both data integration and the enterprise service buses were high on the list of strategic relevant architecture building blocks of European financial services companies. See the January 22, 2008, "European Financial Services Architecture Shows Clear Strategic Direction" report.