

Achieving business agility with BPM and SOA together

Smart work in the smart enterprise



Management summary

Today's economies and commodity markets are swinging rapidly, barriers to global competition are disappearing, and empowered customers are changing preferences and expectations faster than businesses can respond. In such an environment businesses must be able to work smarter, increasing business agility while optimizing their costs. Only too often we find ourselves restrained from meeting these imperatives by siloed processes and rigid IT systems that inhibit collaboration and dramatically slow the process of change.

While BPM and SOA each have value on their own, IBM believes that they are naturally synergistic, and best when done together for business and IT agility, optimization and alignment. When done together, BPM provides the business context, understanding and metrics, and SOA provides a governed library of well-architected service and information building blocks. Both are, in fact, needed in order to dynamically optimize investments, drive operational excellence and manage business risk.

It is important to realize that business agility derived from BPM and SOA has lasting value only when processes and services are reliable, scale to the demands of use, and protect against corruption or misuse of critical business information. Maintaining business performance and integrity in the face of change is critical and requires a reliable, adaptable and scalable environment, organizationally as well as technologically.

This white paper describes the principles for the convergence of BPM and SOA from a business perspective. The primary audiences are leaders and architects that need to understand how to effectively combine BPM and SOA as a key differentiator for successful enterprises in their drive toward business agility.

1. BPM and SOA are naturally synergistic

Today we are witnessing an acceleration of market shifts. Economies and commodity markets are swinging rapidly, barriers to global competition are disappearing, and empowered customers are changing preferences and expectations faster than businesses can respond. At the same time, personal, organizational and business networks are becoming more interconnected, instrumented and intelligent—our planet is literally becoming smarter. This new world presents tremendous opportunities, but to capture them businesses must be able to work smarter, increasing business agility while optimizing their costs.

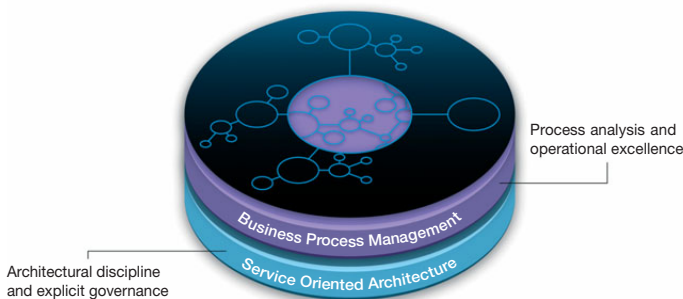
Too often businesses find themselves restrained from meeting these imperatives by siloed processes and rigid IT systems that inhibit collaboration and dramatically slow the process of change. These restraints can only be lifted by working smarter and increasing business and IT alignment. The alignment of business and IT, in support of business agility and transformation, is in fact one of the most important topics on the enterprise agenda. The road toward strategic change involves the right vision, the proper understanding of the existing portfolio, the ability to define and execute the right projects with the right scope and finally a robust platform that ensures the integrity, reliability and scalability of business processes across the enterprise.

The value proposition of Service Oriented Architecture (SOA) is centered around agile and aligned business and IT design and delivery. The ability to architect the alignment between business and IT is a hallmark of SOA, and is the cornerstone for derived business agility, reduction of cost and risk, as well as improved portfolio management.

The notion of business process optimization has been around much longer than SOA. Yet, around the same time that SOA became a mainstream architectural style, the focus in many process optimization communities shifted subtly to one of

Business Process Management (BPM). The key distinction for BPM as a discipline is added focus on flexible and dynamic process design as well as process orchestration and automation through IT enablement. This provides the foundation for agile business optimization and IT responsiveness, a particular aspect of business and IT alignment.

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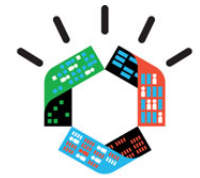
BPM and SOA are best when done together

Note that a valuable side effect of doing BPM and SOA together is enhanced collaboration across business and IT boundaries. Communication and collaboration are brought to life through simulations and visual models of process and service orchestrations, as well as through explicit business contracts that govern the horizontal linkage between business units and the realization of end-to-end processes.

2. Working smarter

For decades substituting IT functionality for people, using automation as a scaling and efficiency mechanism, has been the industry's response to the business' call for change. Yet working harder will not transform the business, will not optimize outdated and inefficient business processes and ultimately will not allow the enterprise to adapt dynamically to the ever faster pace of change. Instead we need to work smarter:

Smart work is about transforming our organizations to take advantage of the capabilities of a smarter planet—so people can make more informed decisions, build deeper relationships and work with more agile and efficient business processes.

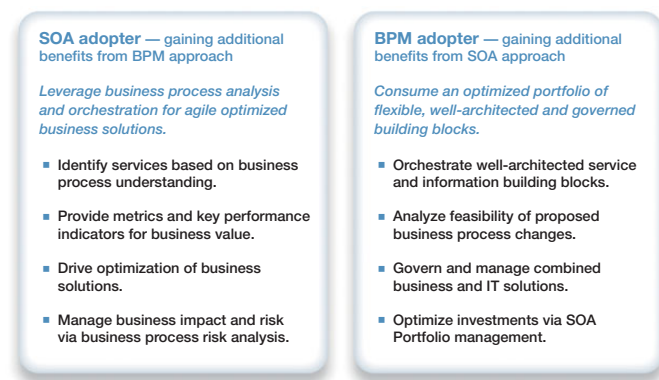


Smart work

According to Gartner, process improvements have been the number one concern of CEO's for the past four years. Studies such as the recent McKinsey survey and analysis of 100 companies in France, Germany, UK and the U.S. show that aligning business and IT efforts results in double the productivity gains of those efforts in isolation. Yet working smarter requires more than simple alignment of efforts; it requires a deep understanding of the business processes of the enterprise, as well as the ability to execute change on these processes in collaboration between business and IT. This convergence of business and IT concerns is imperative in order to enable the three key differentiators for today's enterprise:

- Business agility
- Business performance
- Business integrity

Lately, a lot of focus has been put on business agility, yet agility at the cost of performance or integrity is not that useful. In fact, the exact challenge a modern enterprise must meet is to maintain business performance and business integrity through the continuous transformation that is the inevitable result of business agility. This balance of agility, performance and integrity is exactly where BPM and SOA are strong when done together, as illustrated in the figure below



Balancing agility, performance and integrity with BPM and SOA

The immediate BPM and SOA synergies are important not only to IT, but to the line of business as well. Without business process insight, the monitoring of operational processes and the ability to dynamically change business rules and policies, business evolution becomes opaque and uncoordinated. These capabilities all rely on the agile business and IT alignment and enablement brought by the adoption of SOA.

Furthermore, maintaining business performance and integrity in the face of change requires a reliable, adaptable and scalable environment, organizationally as well as technologically. It is important to realize that there is no value to the business if processes and services are not reliable, can not scale to the demands of use, or leave critical business information vulnerable to corruption or misuse. From a business and IT alignment perspective, we must ensure that IT systems are designed based on a deep understanding of the business and its goals, yet at the same time ensure that the business can be confident in the reliability of those IT systems on which it depends.

Finally the value proposition of BPM inherently relies on the assumption that an agile library of process and service building blocks can be created, managed and governed for the good of the enterprise. When leveraged properly this enables the enterprise to create a business vision, understand the collection of existing processes and solutions in the context of that vision, and finally define and execute the right projects with the right scope. In other words, the convergence of SOA and BPM directly supports agile business optimization and IT responsiveness, maximizing for the entire enterprise the value generated from investing in change.

3. Interdependent processes and services

Classically in the context of BPM and SOA, we talk about “processes running on services,” where (automated) activities in orchestrated processes consume services as part of their execution. So clearly BPM is dependent on SOA. Yet the reverse is also true, as in many cases embedded business

processes are part of the realization of the capabilities provided by a higher level (business) service. This is true for the IT enablement aspect. It is also particularly true when applying SOA principles to the architecture of the business, describing that architecture in terms of business components interacting and collaborating through a well-defined set of business services and interfaces.

The net effect for both business and IT is an architected multilevel structure of interdependent process and service assets, the collection of which needs to be governed and managed for the overall (agile) good of the enterprise.

Let us briefly consider what would typically happen if we had SOA without BPM:

- Lack of disciplined approach to process definition and optimization
- Lack of context for business operational excellence and for managing business operational risk
- Lack of explicit metrics for the business value of service reuse

Similarly, if we had BPM without SOA, we would typically see:

- Lack of a disciplined approach to creating and managing an agile library of well-architected and reusable building blocks (including all of services, processes and information assets)
- Lack of governance and lack of explicit contracts between business and IT participants in an end-to-end process
- Lack of context for optimizing investment across business and IT

Clearly whenever possible an enterprise should coordinate and integrate BPM and SOA initiatives in support of agile business and IT optimization and alignment. Enterprises that initiate both BPM and SOA—but in an uncoordinated manner, driven by different parts of the enterprise—often realize a worst case scenario. In contrast, applying BPM and SOA in a synergistic fashion will help ensure that the forces driving the future of the enterprise join in support of common goals; solving the problems that are critical to the success of the business.

4. Conclusion

While each has value on its own, the discipline of BPM and the architectural style of SOA are in fact naturally synergistic and best when done together in support of agile business and IT optimization and alignment. At an enterprise level this requires the establishment of a robust and scalable environment that will preserve business performance and business integrity during the continuous transformation that is the inevitable result of business agility.

Scaling a successful first experience with BPM and SOA requires careful thought and consideration. From an organizational perspective the enterprise needs to leverage the collaborative power of simulations and visual models of processes and services, as well as integrate BPM and SOA thinking with existing governance and development processes. From a technological perspective the enterprise needs to establish a platform that will scale with the success of the combined BPM and SOA initiative as well as continuously ensure the integrity and reliability of business processes and services.

Effectively combining BPM and SOA will be a key differentiator for successful enterprises in their drive toward business agility. And to that end, IBM's integrated methods, tools and infrastructure is a good starting point that provides a solid foundation for the future.

References

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[Smart SOA™]: IBM white paper, Smart SOA: Best practices for agile innovation and optimization, 2007

[McKinsey]: London School of Economics, McKinsey survey and analysis of 100 companies in France, Germany, UK and the U.S.

If you read this document, you will learn the following:

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For more information

To learn more about BPM and SOA, please contact your IBM marketing representative or IBM Business Partner, or visit the following Web site: ibm.com/soa.

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