



**Accelerating business flexibility,
while reducing costs, with
composite business services.**

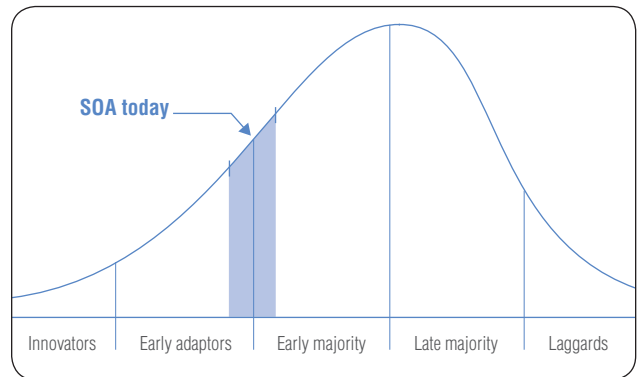


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Introduction: drive more business value from a service orientation

The results are in. Building business solutions based on a service orientation can deliver exceptional value. Analysis of 35 organizations clearly demonstrates that this approach helps organizations respond more quickly to opportunities and threats in the marketplace; 100 percent of the surveyed organizations cited improved flexibility.¹ And companies across diverse industries recognize the advantages. Forrester Research found that 50 percent of the companies it surveyed have either already implemented a service orientation or plan to do so in the next 12 to 14 months. Even more telling, 70 percent of those that have a service orientation in place are making plans to expand their implementations.² Leading companies are using a service orientation strategy to improve efficiency and drive innovation, including eight out of ten of the world's largest insurers,³ 80 percent of the largest United States health plans,⁴ all ten of the world's largest automobile manufacturers⁵ and eight out of ten of the world's largest banks.⁶



More flexible business processes that facilitate innovation and efficiency will give early adopters of a service orientation a clear advantage over competitors.

A service orientation is a set of business, process, organizational, governance and technical methods to enable an agile, business-driven IT environment for greater competitive advantage. Service orientation provides the flexibility to treat business processes, as well as the underlying IT infrastructure, as business-level components that can be reused and recombined to address changing business priorities. In essence, service orientation is a blueprint that can guide you to greater agility, business innovation and competitive advantage.⁷

Of course, a service orientation approach to your business isn't a quick fix. Developing the services that integrate information spread across heterogeneous systems, reduce manual touch points and automate processes takes time and effort. Fortunately, service providers are solving many of the initial challenges associated with a service orientation. Composite business services (or CBSs)—which can help you accelerate the business value obtained from investing in a service orientation—are one such innovation.

CBSs deliver business services that are developed, deployed and combined as necessary.⁸ A CBS is a collection of prebuilt business-level services that can quickly connect your business with your customers, partners and suppliers. CBS attributes help provide ideal solutions for addressing complex, industry-specific business challenges.

This executive brief introduces the CBS concept and explains how you can use the approach to accelerate overall solution time to value, reduce costs and increase the flexibility of your service orientation implementation.

Piecing together composite business services

Chances are you've heard about prefabricated homes and buildings, which are constructed using factory assembled components delivered to a building site. In recent years, prefabricated buildings have evolved into an attractive, high-quality alternative to traditional construction methods, because prefabricated buildings provide advantages related to cycle time, cost and quality. And because prefabricated building components are created in a controlled environment using rigorous, robust processes, they can be assembled more quickly and with consistent high quality—and far less waste. Upon delivery to a site, the components can be put together in a specified configuration in as little as a weekend, compared to the months that it can take to assemble the same building using traditional construction methods. In the case of offices or warehouses, prefabricated designs often support some degree of modularity—providing the added benefit of flexibility in how space, such as administrative offices, conference rooms and clean rooms, can evolve and be reused.

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CBSs are based on business principles that are similar to those of prefabricated, modular buildings. The term *composite* describes something that is pieced together from, or composed of, distinct parts. As the name implies, composite business services are built by combining associated business services. So before discussing how CBSs work, let's quickly review business services.

Business services are analogous to standardized parts that are used in a building. Builders rely on standard board sizes, electrical circuitry, plumbing, and so on, that comply with local building codes—or regulations—rather than creating the standards from scratch each time a customer wants a new home, warehouse or office. Just this step simplifies the building process for everyone from the architect to the contractors assembling the structure. The components can be composed in virtually limitless combinations to address buyers' unique needs.

Similar to standardized building materials, business services are the basic building blocks of a business process model. Unlike the physical parts of a building, however, business services can be reused in multiple places. Business services enable you to take everyday business capabilities and functions from existing applications and reuse and recombine those capabilities and functions to support new activities.

A service may be a business function, such as *check customer credit*, or it may be a system capability, such as *log in user*. With a service orientation, you can build, deploy and integrate these services on the fly without disrupting the underlying siloed business systems and processes. Business services alone dramatically increase the value you're able to extract from existing investments in a business model, while reducing the time and cost it takes to respond to marketplace demands.

The prefabricated building approach combines standardized building materials into standardized parts, such as walls, staircases and roof trusses, which are designed to meet building codes. The manufacturing environment is highly controlled. Materials can be checked to ensure quality and can be assembled quickly by dedicated teams using consistent processes. In addition to improving overall quality, exacting manufacturing standards diminish waste. These same general ideas apply to the CBS development process.

By creatively combining business services and using robust tools and processes to produce CBSs, vendors can provide consistent, high-quality solutions to address widespread business needs and challenges. For example, CBSs provide a means to reliably automate and orchestrate specific business processes across and beyond the enterprise for less

cost and time than typical integration approaches. More specifically, you can use CBSs to coordinate actions and communication in real time across legacy systems, channels and product lines, and with business partner and supplier applications and services to help streamline previously labor-intensive manual touch points and processes. CBSs drive even greater business-process flexibility and efficiency than any single service, because they merge multiple process-centric functions. What's more, you can reuse the same CBS across lines of business to facilitate more uniform and integrated business operations.

While a company could benefit from using various prebuilt components, such as staircases and roof trusses in building an office, the greatest possible value is derived from piecing together an entire building from prebuilt parts. (And if offices can be dismantled and relocated, they often can provide even more value). The same holds true for CBSs, which can be assembled into comprehensive suites that support entire industry domains, such as insurance policy administration. CBS capabilities combined in a suite collectively provide more comprehensive capabilities within that domain. For example, within the policy administration domain, a suite may include a rate, quote and issue CBS along with policy servicing and policy renewal CBSs.

Composite business services in action

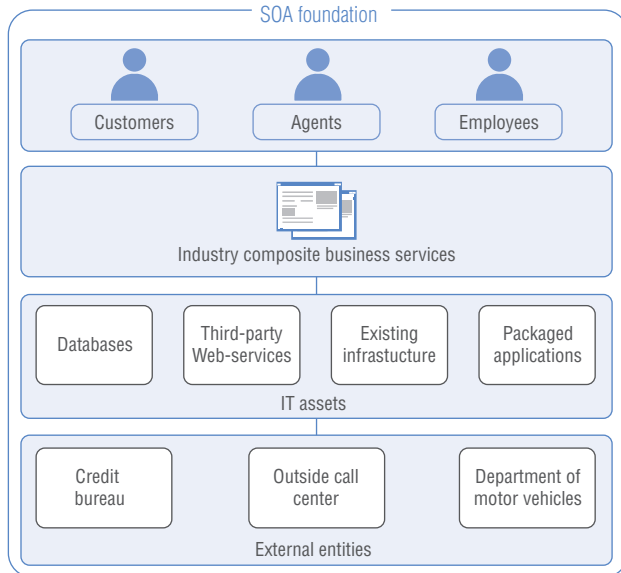
To gain a clearer picture of what CBSs are and what they're capable of, it's useful to look at a couple of examples. Although different industries will require unique types of CBSs, the following case studies demonstrate how CBSs work in the real world.

Large insurance company

A premier U.S. property and casualty insurance company faced increasing competition and new marketplace demands for faster, more personalized service. Responsiveness of service and overall ease of doing business are critical to both independent agents and their customers. And the stakes are high, as agents typically send 80 percent of their business to their top two preferred carriers.

To drive new business, the insurance company needed to differentiate its services and get new products to the marketplace more quickly. However, heavy reliance on inflexible legacy systems stifled the company's options. To offer outstanding service and support to agents across its core business functions, the company needed to improve process flexibility while reducing manual agent touch points and operating costs. It also needed to comply with regulatory requirements.

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A CBS platform can dynamically integrate disparate internal assets and even external third-party applications to address user needs.

The insurer deployed a CBS platform. The solution enables the company to compose insurer-specific business processes using prebuilt and custom business services to connect applications and processes that don't exist in the same system or domain. For example, the insurer can now dynamically integrate mainframe applications, information management system billing software, single sign-on user authentication systems, agent authorization software and even external, third-party applications in different configurations to address changing user needs. The services are published, managed and governed across the enterprise using industry standards.

With the help of its CBS platform, the insurer has realized the following types of benefits:

- Improved business agility through the ability to deploy CBSs on the fly to address changing marketplace needs (for example, the insurer incrementally delivered a homeowners quote application across multiple states in just six months, and the project was completed in less than one year)
- Reduced operating costs through automating productivity-draining, paper-based processes and enabling the reuse of 52 percent of services across multiple implementations
- Strengthened partner relationships and improved gross premiums—generating between five and ten times the expected quote volumes—by deploying CBSs that automate agency-carrier collaborative processes and make the quote system more easily accessible to agents
- Reduced business risk by facilitating compliance with industry regulations, including Association for Cooperative Operations Research and Development (ACORD) standards as well as Web Services Interoperability standards; the company received an award at the 2006 ACORD-LOMA event in Las Vegas, Nevada, for its innovative service-oriented architecture (SOA)/ACORD-based implementation

Health plan

To remain a leader in its marketplace, a regional health plan with more than two million members constantly needs to improve its services to healthcare providers. As part of its efforts, the plan sought to streamline processes that required manual touch points, such as telephone, facsimile, e-mail and paper-based transactions. And to maintain marketplace leadership and increase competitiveness, the plan sought to securely expose and personalize core administrative processes for healthcare providers by offering self-service tools that were unavailable from competitors.

The health plan deployed a CBS platform solution that enabled the organization to deliver new, automated, personalized and configurable processes. The new processes adhere to regulations such as those specified under the U.S. Health Insurance Portability and Accountability Act (HIPAA). The solution also helped the company rapidly automate payer-provider collaborative processes. For example, the company created an automated online claims filing and error correction service.

The health plan has acknowledged the following types of benefits from its CBS implementation:

- Reduced time to market and increased IT asset reuse with the help of prebuilt healthcare assets
- Increased cost savings and performance visibility through process automation and business dashboards that monitor key performance indicators
- Reduced partner service enrollment and administration significantly, because new providers don't need to modify their existing systems and processes to do business with the health insurance provider
- Reduced claims errors and improved claims first-pass rates

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More capabilities, less cost and time

The above examples illustrate how CBSs can be developed and consumed in different ways. Because they are created to solve business challenges, CBSs must be driven by the business side of the organization, working in close collaboration with the IT team. In many cases, organizations may develop customized CBSs to address unique business needs. For more common processes, however, vendors, business partners and even companies within a given industry can publish standards-based CBSs that organizations can incorporate into their own business processes. Either way, CBSs help amplify the benefits of a service orientation.

The business benefits of a service orientation have been proven in client implementations. An in-depth study of 30 IBM clients that were in various stages of service orientation-related projects revealed compelling benefits. Nearly all of the clients indicated that their service orientation project helped to lower costs. All of the clients acknowledged increased business flexibility. And approximately half saw revenue growth.⁹ Through faster implementation of more sophisticated services, IBM anticipates that CBSs will help drive even better results from service orientation projects.

Accelerate the time to value of a service orientation

Just like a prefabricated structure—which builders can assemble in as little as a day to a week depending on the size—CBSs can help you get more benefit from your service orientation in less time. The greatest benefit can be found where a CBS is already in use to manage a business process, and it is leveraged as a new CBS in another part of the organization. In many cases, it can be implemented in a matter of weeks, rather than the months or years typically associated with traditional application development and implementation processes. And in cases in which you're able to use the same CBS across multiple lines of business, the time savings can add up quickly. For example the property and casualty insurer discussed in the first case study above was able to deliver new business services every few months by reusing services. In fact, the company implemented rate and quote services under budget and in a company time record (less than a year).

Lower costs

A prefabricated structure usually costs significantly less per square foot than a stick-built one. Likewise, using pre-built CBSs costs less than completing a project using a standard application development approach. Because a CBS does not start from scratch, it leverages what already exists as much as possible. This potentially could reduce the costs to implement a new process by 30 to 50 percent. And while the up-front costs of prebuilt CBSs are compelling, they also drive cost savings on other levels. For example, CBSs support the reuse of core IT assets, and CBSs themselves can be reused. Because a CBS is built using reusable components, these components are reused across multiple implementations, thereby reducing the cost and time to deliver. For example, the insurer described in the first case study above reduced project delivery costs by almost 25 percent—while delivering in record time. By automating transactions and reducing manual touch points, CBSs can drive significant savings. Moreover, because you can dynamically configure CBSs, concomitant change management processes are less labor intensive and thus less costly.

Improve flexibility

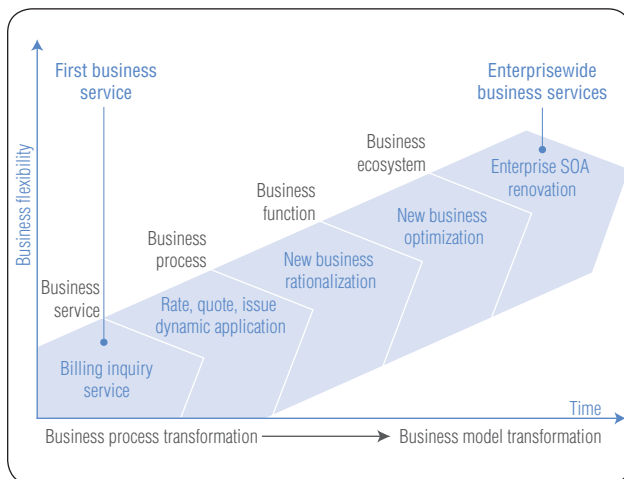
Given today's competitive pressures, the ability to rapidly adapt and innovate business processes based on changing marketplace drivers is essential. Standards-based CBSs give you more flexibility to change service behavior across business processes and disparate IT systems. CBSs also enable you to personalize service delivery through multiple communication channels, such as the Web and interactive voice response systems. Your lines of business and overall company can continually build on CBSs to rapidly define new processes based on changing needs. And CBSs make it easier to accommodate mergers and acquisitions.

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How do you get started?

When it comes to laying the foundation for a service orientation and CBSs, you have options. You can build them yourself or purchase them from IT vendors, which are starting to create and sell industry-specific solutions. Just as when you add new rooms or space to an existing office or warehouse, your success with CBSs will depend on a good plan or blueprint. After studying an array of service orientation-based projects, IBM has found that the principles outlined below will help you optimize the value of your service orientation, over time, as represented in the figure below.



The value multiplier of enterprise-wide business services

Focus on a real business problem

The projects that provide the best returns are designed to address business issues, such as consolidating customer information, simplifying processes for channel partners and improving customer service. Very few focus on IT performance. In cases where a service contributes additional revenue, the service orientation benefits are more tangible and obvious—making it easier to convince skeptics as well as to fund further investments.

Start small, but start now

Most firms start with a small, self-contained project that provides a model to demonstrate what's possible with a service orientation and CBSs. The simpler the service the better, as the learning curve and complexity of other project parts will be challenging enough. It's also important to start now. Like virtually any new idea, a service orientation that employs CBSs requires special business and IT skills—which take time to build.

Think long term when measuring return

Oftentimes, companies adopt a “just do it” attitude based on conceptual advantages of a service orientation, rather than a detailed business case. But whether you simply estimate or try to quantify the return on service orientation investments, it is important to look beyond the initial implementation. Because initial investments in a service orientation often include an up-front infrastructure investment, the major payoff typically comes in subsequent implementations.

Why IBM?

IBM possesses the technical and industry knowledge required to deliver on the value of taking a service orientation approach to business with CBSs. With a deep and broad set of tools and a worldwide team of professionals, IBM has the rare combination of assets that are necessary to build complete CBS solutions and provide the supporting platform and tools. You can already purchase an array of industry-specific CBSs from IBM, and we're constantly adding more. IBM is also creating two SOA solution centers, at each location of which up to 500 SOA experts will focus on developing repeatable industry services that are built on a standard platform. Solutions you can build and extend to more quickly provide the strategic competitive advantages of your dreams.

Composite business services: build value from the ground up

From the ground up, CBSs and a service orientation provide a practical framework to address increasingly complex IT and business challenges. And CBSs' value will increase rapidly as more and more standardized solutions become available.

For more information

To learn more about service orientation and composite business services, visit:

ibm.com/software/solutions/soa/services.html



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Route 100
Somers, NY 10589

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