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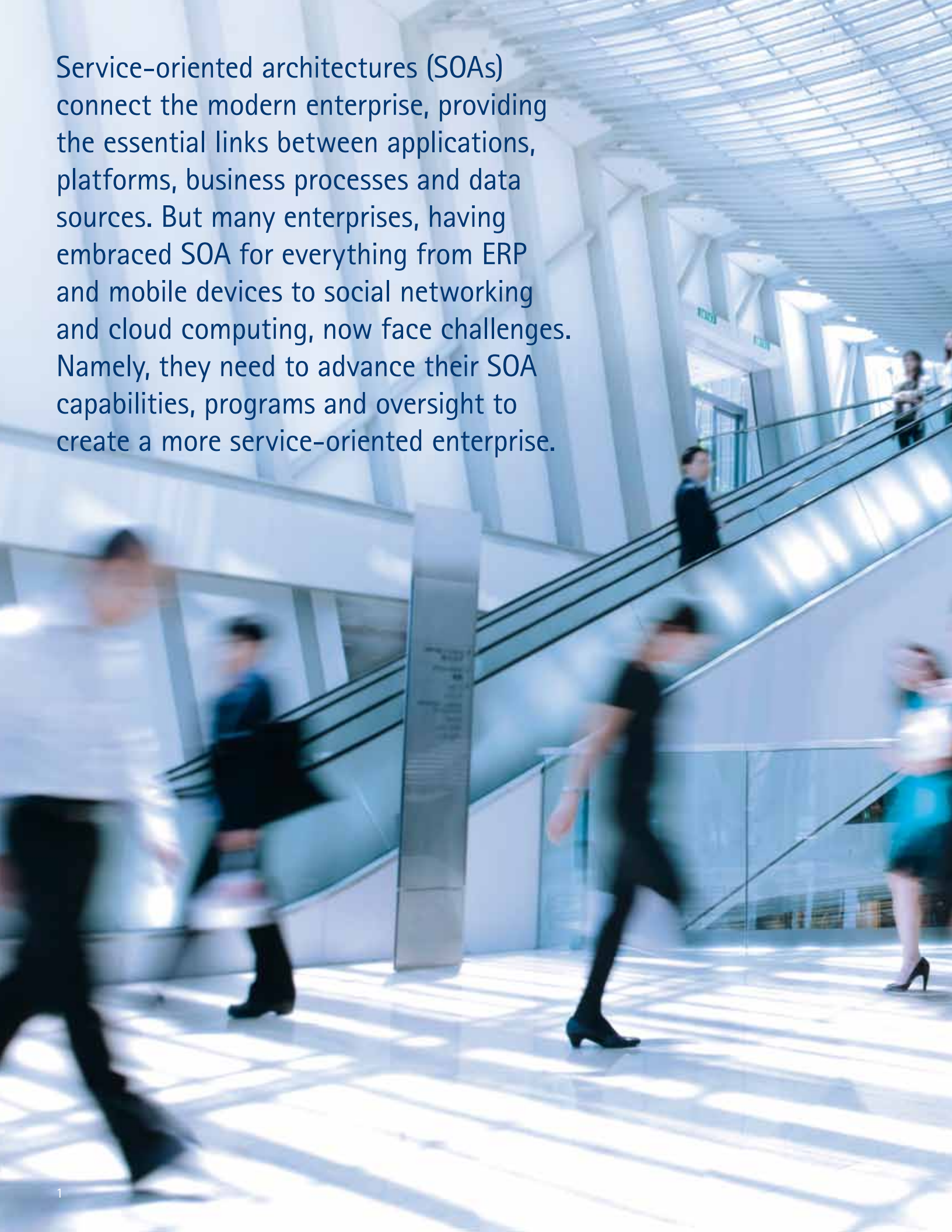
Accenture Service Oriented Architecture  
Unleashing the full potential of  
the service-oriented enterprise

A large, stylized yellow chevron graphic pointing to the right, composed of two parallel diagonal bars.

High performance. Delivered.



Service-oriented architectures (SOAs) connect the modern enterprise, providing the essential links between applications, platforms, business processes and data sources. But many enterprises, having embraced SOA for everything from ERP and mobile devices to social networking and cloud computing, now face challenges. Namely, they need to advance their SOA capabilities, programs and oversight to create a more service-oriented enterprise.



Can the importance of SOA be overstated? The need for a highly interoperable framework that provides businesses with key information about their internal operations, partners and customers has never been greater.

Accenture sees SOA continuing to grow in importance not as an end goal, but rather as a constantly evolving "technology enabler." Using SOA enhances almost every type of IT project—from traditional systems integration and business process management (BPM) projects, to custom development and cloud computing. That's why SOA is a standard technique for designing end-to-end business solutions that span processes, systems, and especially data.

Businesses thrive on data, even while they may struggle to manage terabytes or petabytes of information. With the amount of data stored by the average business doubling in volume every 1.2 years, organizations need better techniques for providing real-time access to this essential information—and turning information into insights, and insights into actions that lead to positive business outcomes. That's why more and more organizations have embraced SOA to provide:

### Security

Data creators and consumers are increasingly working from mobile devices and via the cloud, which makes securing, sharing and accessing essential information in real time more difficult.

### Accessibility

In the always-on enterprise, accurate data must be easily accessible via any channel—including smartphone, tablet, laptop, Web service, and social network.

### Speed

Critical business decisions, based on available data, must be made in hours or minutes, not days or weeks.

### Management

As data volume continues to increase exponentially—augmented now by data from embedded hardware (automobiles, utility meters, consumer goods) and interactions and collaboration with customers (largely unstructured data such as information in e-mails and social media channels)—SOA provides a better way to manage, store, secure, and retrieve all of this data.

Rapid, reliable access to enterprise data is no longer optional. But it should be easier.

### Enter SOA

SOA provides a consistent, scalable, repeatable and cost-effective way to connect critical data, technology, processes and people, both on the premises and in the cloud. That's the promise of a well-built SOA foundation. Already, many organizations have turned to SOA to make point improvements: to streamline, retire or modernize existing infrastructure, support new software as a service (SaaS) and open source application rollouts, launch business intelligence programs, provide real-time information feeds, and transform business strategy into services. For businesses that want bigger returns from SOA, what's the next step?

# SOA Business Advantages



## **Accessibility**

Deliver data and collaboration capabilities to knowledge workers via PCs, portals, mobile devices or composite applications, regardless of where that data resides.

## **Agility**

Create a flexible SOA foundation that supports quick and cost-effective business strategy changes, by separating business processes from technology.

## **Analysis**

Enable rapid decision making by giving business leaders real-time, mission-critical business intelligence (BI), backed by analytics, dashboards, reporting tools and mobile delivery.

## **Efficiency**

Apply SOA to consolidate, streamline and eliminate existing applications, as well as to embrace applications, infrastructure and platforms based in the cloud.

## **Value**

Connect old and new technology investments, as well as mashups, social media, the cloud and more, in a secure, controlled and cost-effective manner.

# SOA Strategies: Top 5

Based on Accenture's experience in helping numerous organizations advance their SOA capabilities, programs, and oversight, Accenture recommends pursuing these five SOA-driven strategies to create a more service-oriented enterprise:

## 1. Make speed king, or else

Consumers, aka employees, live in an "always on" computing world. Systems magically seem to connect, and should. For organizations that correctly designed their service architecture foundation, they'll be able to satisfy new requests—linking business-critical systems to cloud data, for example—in days, rather than weeks. If not, they should reexamine their service architecture to identify where it's breaking down.

## 2. Address mobility with SOA

Customers and employees today work in disconnected, always-on businesses. These mobile users rely on devices with a small screen, which deceptively requires more robust back-end support. Accordingly, leading-edge organizations are advancing their ability to quickly and reliably put the right information on smartphone screens by using SOA to handle everything from mobile content management to unified user profiles.

## 3. For cloud computing, less is more

For years, CIOs have battled data silos. Then, along came the cloud. Cloud-based applications, platforms and infrastructure promise easier manageability and lower costs. But data can't live in isolation. Since cloud vendors often charge on a per-transaction basis, it pays to rethink how data gets moved to and from cloud environments. A correctly designed SOA helps ensure that less is more.

## 4. Govern, to streamline

Accenture's customers used to view governance as part and parcel of routing data or handling errors. No longer. Organizations have embraced SOA and created numerous related services. But many organizations have become, in effect, SOA-oversaturated. They have multiple service buses, overlapping design and testing groups, and sometimes even duplicate services. The mandate now: to streamline, through governance.

## 5. Eliminate latency

SOA started as a way to make systems more interoperable. Today, however, it's helping businesses know their next move. Leading airlines, for example, not only reschedule delayed customers' flights, but also their hotel reservations and car rentals. Utilities gather consumers' meter readings automatically, via the smart grid. Field service personnel receive real-time alerts and routing to their next assignment. The name of the game now: zero latency.



# Taking the Next Step for SOA



Moving forward with SOA and maximizing its benefits requires governing the use of SOA across the enterprise. Organizations that do this well can maximize reusability and cost-effectiveness. They'll also identify innovative new ways to connect applications, functionality, and data stores to eliminate system and data-retrieval hassles, maximizing their competitive advantage.

To help organizations create a results-driven SOA strategy that supports and enhances their organizational, business and information access requirements, Accenture offers three services:

## SOA Strategy: Roadmap

For organizations just starting with SOA or that require a well-defined SOA program path, this comprehensive SOA strategy and roadmap solution:

- Creates a comprehensive, forward-looking strategy for using service-oriented technology and processes to transform the business, while capitalizing on emerging trends and technologies, industry leading practices, and a multi-channel approach (including mobile devices and the cloud).
- Identifies new efficiencies and economies of scale, to help ensure that greater use of SOA will generate greater business benefits, efficiency and cost control.
- Addresses critical components—people, processes and technology—for adopting SOA across the enterprise.
- Includes analysis, planning, roadmaps and governance frameworks, backed by rigorous change management, project tracking, and buy-in from business leaders.
- Produces a prioritized list of SOA transformation steps, backed by a solid business rationale and ROI, providing clients with a plan for effectively adopting and scaling SOA to support their business now, and in the future.

## SOA End-to-End Design and Delivery

Need rapid, reliable, and cost-effective SOA capabilities? Accenture's SOA approach addresses end-to-end business concerns, using industrialized delivery methods, training programs and tools to drive SOA adoption throughout the organization.

Here's how Accenture's "full lifecycle" SOA approach balances current and future requirements:

### Design & Delivery

Accenture combines its extensive cross-industry SOA experience with the latest tools, accelerator assets, reference architectures, patterns, leading practices, and testing tools to provide IT and business executives the foundation for delivering the full lifecycle of service-based solutions.

### Industrialization

Accenture helps improve quality and drive down costs leveraging our industrialized tools and methodologies. Organizations can benefit from Accenture industrializing their existing delivery methods or can use Accenture's one-to-many delivery model, which builds SOA services quickly and cost effectively through a shared pool of resources and management. Organizations benefit from better quality, scalable capability, increased speed-to-market and reduced ramp-up time. For example, clients can use Accenture to rapidly pilot a SOA program or deliver ongoing integration services via a "SOA assembly line."

### Governance

Accenture helps clients establish their own SOA Center of Excellence, to help them utilize the strategy, roadmap, skills, capabilities and solutions to continue capitalizing on SOA well into the future.

### BPM

As a leader in BPM, Accenture helps business leaders understand how their key business processes are functioning, as well as how they can be streamlined and strengthened via SOA. Accenture's extensive industry process libraries also help speed projects and deliver industry leading practices.

## SOA Modernization: Extending and Streamlining

Organizations with more mature SOA programs often face speed, cost-control and quality challenges, owing to less mature governance capabilities. Accordingly, Accenture's SOA modernization program:

- Helps organizations maximize pre-built SOA component use, improve training programs, and deploy tools that facilitate smoother SOA adoption throughout the enterprise.
- Enables SOA practitioners to centrally manage their service-development lifecycle, to increase quality and cost control.
- Delivers advanced SOA methodologies, tools and processes, focused on industrializing the design and delivery of integration and service-based solutions.
- Sustains ongoing project development, using Accenture's delivery centers and accelerators to rapidly provide needed infrastructure, capacity and skills.

## SOA Helps Business Process Management

A well-executed SOA program can help organizations improve their business process management capabilities. One key strategy is to uncouple business processes—composed of a sequence of tasks or activities—from technology. By doing so, organizations gain flexibility. They can more easily extend, automate and create new business processes, making them available as services to other business groups, business partners, or even customers, all via SOA.

To facilitate this more lightweight, flexible and sustainable approach to business process management, Accenture builds its BPM solutions with a SOA foundation. Backed by Accenture's process analytics and business process design acumen, as well as the Accenture SOA Center of Excellence, clients can more easily and cost-effectively achieve high performance as a result of BPM.

# Why Accenture?

Helping businesses maximize the benefits of SOA and achieve high performance.





No matter whether your organization is just beginning with SOA or already has advanced SOA practices and infrastructure in place—but needs to identify the next step—Accenture offers the right strategic approach, breadth of skills, industry knowledge and project experience to help organizations more quickly, efficiently and cost-effectively deliver and capitalize on SOA.

#### **Deep Experience**

Accenture offers unparalleled SOA project experience, and continues to advance the SOA state of the art, having already delivered thousands of successful SOA implementations over the past 10 years.

#### **Vendor-Neutral Perspective**

Accenture offers sound business advice and technology acumen, as well as proven industry knowledge, backed by candid, objective and vendor-neutral technology recommendations.

#### **Innovation and Collaboration**

What will be the state of SOA in three years? Accenture's ongoing research into emerging SOA trends, together with its strong relationships with major SOA players, enables Accenture to deliver innovative, forward-thinking architectures that utilize existing technology while laying the groundwork for future capabilities.

#### **Proven Industry Expertise and Process-Led Design**

Accenture offers extensive industry and business process knowledge, together with its ability to craft technology solutions that enable high performance. With Accenture's proprietary library of more than 20,000 process models across 71 industries, Accenture's clients have a head start in their drive to achieve process excellence.

#### **Technology Leadership**

SOA provides an ideal foundation for the latest technologies and techniques, including cloud computing, open source software, mobility, business process management, and rich Internet applications. Accenture's leading-edge architects apply their deep experience in these areas to help ensure that SOA strategy and design delivers rich, robust and extendable solutions.

#### **Key Relationships**

Accenture's strong relationships with SOA ecosystem leaders, including Oracle, IBM Software, TIBCO, Microsoft, SAP, Pegasystems and Software AG, help clients increase their SOA benefits, manage associated risks, speed implementations and reduce costs.

#### **Innovation Centers**

Accenture's Innovation Centers for Oracle, IBM Software, Microsoft SAP and Open Source create pre-built solution frameworks that are industrialized, secure and highly repeatable, delivering higher quality and lower cost to our clients.

#### **Accelerators**

Accenture's SOA accelerators help clients rapidly adopt required reference architectures, delivery architectures and delivery methods, enabling organizations to quickly define their required SOA architecture, technology and governance models. Other accelerators, meanwhile, such as the Accenture Foundation Platform for Oracle, expand this SOA focus and help clients modernize their environment and build a foundation for their future.

#### **SOA Center of Excellence**

The Accenture Global SOA Center of Excellence supports Accenture's solution planning, architecture and delivery capabilities, creating lower delivery costs, increased quality and more consistent delivery, thanks to its industrialized platform.

#### **Global Delivery Network**

The Accenture Global Delivery Network, which includes more than 5,000 technology architects based in 50 facilities around the world, enables organizations to build and maintain an easily managed, cost-effective SOA foundation.

## **Industry Solutions**

To deliver maximum flexibility and cost savings to its customers, Accenture embeds a SOA foundation into many of its critical industry solutions, including:

### **Alnova Financial Solutions**

Offers SOA-based banking functionality, supporting traditional business products, wholesale banking and wealth management, through an integrated, browser-based environment, multiple delivery channels and integration with portals and third-party front ends.

### **Claims Components Solution**

By using SOA, this web-based, scalable software suite manages every aspect of a claim—used by more than 65,000 claims professionals worldwide to process 40 million claims per year—and provides multi-channel access, easy configurability and a componentized design for easier, phased implementations.

### **Public Service Platform**

Preconfigured with 50 to 70 percent of the services a public agency requires, all components of this SOA-based platform can be easily updated or replaced, enabling agencies to rapidly respond to new requirements, while minimizing costs and risks.

### **Smart Grid Data Management**

Together with the Accenture Intelligent Network Data Enterprise (INDE), Smart Grid uses SOA to consolidate all grid data, enabling utilities to align their business transformation plans with smart grid design, minimizing infrastructure costs and maximizing the actionable business intelligence generated by smart grid data.





# Client Success

## Comgás Solution

Accenture helped Comgás, a large industrial natural gas distributor, use SOA with a business process management methodology to develop a streamlined, Web-based CRM capability to enable penetration of the residential market to boost growth potential and profits, and to improve service performance through business process redesign.

### Benefits

New user-friendly, web-based front end order management application reduces the work needed to collect customer information, negotiate and sell new contracts, and, eventually, to sell new product and service bundles in combination with basic contracts. Third-party resellers of Comgás services can deliver physical contracts and upload contract data into the company's CRM system up to 11 minutes faster—a lead-time reduction of 85 percent.

## EMT Madrid Solution

Accenture and EMT Madrid, a mass transportation provider with more than 2,000 busses that serve 500 million riders annually, implemented a business process reengineering program, including an SAP upgrade and SOA foundation, to automate numerous business practices, integrate with a non-SAP environment and increase organizational efficiency for this transportation provider.

### Benefits

Improved bus availability by 10 percent, accelerated repair times by up to 80 percent, increased bus service punctuality and improved overall customer satisfaction.

## Large North American Financial Institution

### Solution

Streamlined integration platforms using an SOA approach by consolidating and reengineering applications while maintaining quality and performance.

### Benefits

Significantly reduced complexity within the environment through the retirement of 11 integration applications while simplifying the integration of 10 others. Implemented a number of technology enablers which improved operational stability and resiliency, improved diagnostic capabilities, and improved productivity.

## Royal Caribbean Cruises Solution

Accenture helped Royal Caribbean Cruises develop a robust, web-based reservation system using SOA. Cruise Match, the SOA-based reservation application and collection of almost 70 Web services, enables travel agents to book individuals or groups on cruises— replacing an outdated and limited legacy system—and also integrates with numerous travel websites, including Expedia and Orbitz.

### Benefits

Increased sales and brand loyalty, by providing travel agents and customers with access to the latest Royal Caribbean and Celebrity Cruises vacation fares and schedules, as well as instant booking and high-speed transactions.

## Turkcell Solution

Accenture helped Turkcell, Turkey's leading mobile operator with 31 million subscribers, complete an IT transformation to reduce architectural complexity and integrate legacy systems with both a new portal and an Accenture-developed platform based on Oracle software and SOA.

### Benefits

SOA-based architecture allows for greater organizational speed and flexibility, while reducing complexity, as Turkcell develops, deploys and manages new, value-added services and product bundles for its customers.

## United States Air Force Solution

Accenture and the Air Force initiated a wide-ranging, multiyear program to move from decades-old mainframe systems to enterprise resource planning systems based on SOA that modernize and streamline Air Force accounting and management, while supporting a complex array of Air Force and federal government regulations.

### Benefits

A business-process focus creates adaptable, flexible and robust heterogeneous IT systems—modernizing the way the Air Force does business by integrating with other US government enterprise systems (e.g., Marines and the Army) for greater inventory, logistics, invoicing and cost control. In addition, the Air Force and the DoD Finance and Accounting Shared Services Center save costs by automating transactions and by consolidating 30-plus legacy systems.



## Contact

To find out more about Accenture's SOA capabilities, contact:

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## About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 244,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$25.5 billion for the fiscal year ended Aug. 31, 2011. Its home page is [www.accenture.com](http://www.accenture.com).