IBM Global Business Services

IBM Institute for Business Value quick read

Application Innovation Services
Banking

Service-oriented architecture

Revolutionizing today's banking systems

Globalization has placed more pressure on banks to increase collaboration and integration within their value chain of partners, suppliers and customers. In response, many institutions have "pieced together" systems within and outside their business. This has resulted in redundant, inefficient silos of applications and information that make it hard – and expensive – to integrate channels and services, streamline processes, heighten customer relationships and support growth. We believe that service-oriented architecture (SOA) can be the key to overcoming these challenges.

Introduction

The Internet has forever altered the balance of power between banks and their customers. While universal banks are likely to continue to control the largest share of the market, community banks, industry specialists and non-banks will compete by offering unique and relevant value to targeted groups of customers. It is evident that the requirements for doing business successfully are going to escalate dramatically over the next decade.

How are banks going to attain the integration, flexibility and efficiency needed to succeed in this complex business environment? Service-oriented architecture (SOA) may be the solution. SOA breaks applications down into standardized, repeatable "services" that can be combined with those of partners, suppliers – even customers. With SOA, an enterprise only has to build one application, which it can reconfigure in various ways to meet changing business and market conditions.

The following three scenarios – discussed in detail in the full version of this paper – explain how SOA can be used to simplify payments, support multichannel integration and streamline account opening.

Simplifying payments. In many banks, globalization, mergers and acquisitions, mounting regulatory requirements and electronic payment options have created infrastructures with numerous interfaces and applications, and point-to-point solutions that are inflexible and costly to maintain. In our scenario, we show how SOA's standardized approach and common set of reusable services can help reduce the number of connections and steps involved in the payment process – with fewer interfaces and fewer transactions to manage.

Multichannel integration. Typically, applications are scattered throughout a bank's business systems. Customer information is often housed in application "silos" – making it difficult to capitalize on the potential of each customer relationship and provide customers with the most attractive range of products and services. Our example illustrates how a bank can apply SOA services (customer, product, balance, history) to any area where they are relevant – affording an all-encompassing view of the customer relationship.

Account opening. For most banks, the account-opening process is impeded by isolated legacy systems – stalling efforts to integrate applications and information related to this task. With SOA, a bank can use a single SOA service "layer" to access account-management functions within the institution's central business applications, and offer a full "360-degree view" of customer information across core banking systems. Although our example shows a New Account Application System using these services, SOA can also be used directly by other applications, such as online banking.

Conclusion

Banks must collaborate and technology must be part of that collaboration. SOA offers an approach to banking payments that is a progressive solution with lower

cost of operation than today's alternatives. This inherent flexibility would position a bank for new payment channels, and new payment sources and targets.

To support multiple distribution channels, a layer of SOA services allows more flexibility for change and greater product distribution, as channel applications and channel support applications are no longer tightly linked to core banking systems. An SOA solution can also enable the opening of an account for multiple product lines that is seamlessly integrated with multiple back-end systems. The benefits can include not only lower costs, but increased revenue and optimized customer relationships.

SOA is indeed revolutionary. By exploiting its capabilities internally, as well as with external entities of all kinds, institutions can forge new connections and support new levels of collaboration and innovation. There is simply no limit to the number of connections and configurations – with benefits that promise to reshape not only a business or an industry, but a whole economy – even the global economy. In this way, IBM believes, SOA is potentially as transformative as the Internet.

How can IBM help?

- ***IBM Solutions:*** Each scenario in this paper relates to one or more different solutions.
  1. Simplified integration to address Payments
     - Back-office Operations for Payments
  2. Multi-channel integration
     - Front Office Optimization through Multichannel Transformation
  3. Scenario 3: Account opening
     - Front Office Optimization through Multichannel Transformation
- ***Application Services Offerings:***
  - Application Development
  - Business Application Modernization
  - Complex Systems Integration
  - Enterprise Architecture & Technology
  - SOA Strategy & Transformation
  - SOA Design, Development and Integration Services
- ***IBM Payments Framework for Financial Services:*** an enterprise-wide blueprint for deploying payments solutions to address a central industry need – a more efficient and flexible payments infrastructure.
- ***Multichannel Banking Transformation Framework:*** providing context for integration between banking solutions.

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