SOA Offers Best of Both Worlds

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Abstract

For the past two decades, there has been tremendous pressure on organizations to modernize their legacy IT applications so as to reduce operational cost and maintain competence in a fast changing business world. At the same time, some of the complex business functions and processes may still have to reside in legacy applications as there could be major risks in porting them. Organizations that do not have risk taking abilities or budgets to do away with these legacy systems face a big challenge in the real world. Using Service Oriented Architecture (SOA), an organization can bring new enterprise solutions on new technologies. They can continue to use key legacy applications without worrying about the integration and interoperability aspects. This POV brings out our views about how an organization can move towards enterprise SOA, using Oracle E-Business Suite (Oracle EBS) and Oracle SOA products.
Need for Enterprise Applications

In today's extremely competitive world, any business needs a robust yet adaptable IT infrastructure. Gone are the times when each business function would have its own application, and database and IT staff would struggle to integrate data across different systems. Today, many companies are adopting enterprise applications for gaining a competitive advantage with high Returns on Investment (ROI).

Some examples of enterprise applications are Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supply Chain Management (SCM), Asset Management, and Product Lifecycle Management.

ERP is the most successful driver that information technology has lent to the business world. Handling a mid size to large size business without ERP is like climbing the mountain without shoes. In the early days, it was only possible for large companies to deploy the ERP package due to the high costs involved. However, as the ROI is evidently high, more companies have started adopting the ERP path.

An ERP Application

- Enables a common database across all key business functions
- Offers high synergy, through information, among all the resources of an organization - men, material, money, and machine
- Automates large business process areas through a single system, and reduces the need of any external interfaces for data exchanges that existed earlier.

Oracle EBS

Oracle EBS is the most comprehensive suite of integrated global business applications. It contains several product lines, including:

- Oracle CRM
- Oracle Financials
- Oracle Human Resource Management System (HRMS)
- Oracle Logistics
- Oracle Order Management
- Oracle Transportation Management
- Oracle Warehouse Management Systems

These applications seamlessly integrate with each other.

Legacy World – Not Completely Dispensable

As we have seen, the growing information needs of an enterprise make it imperative to replace disintegrated old systems with enterprise applications like ERP or CRM. The flip side of the coin, however, is that replacing all of these legacy systems is not an easy task for business owners. Numerous years of coding effort, along with a heterogeneous mix of hardware and software from different eras and suppliers, have made these efficient yet complex old systems highly inflexible. The complexity and inflexibility of legacy systems can hinder the ability to innovate and create new IT solutions.
There could be more compelling reasons that make an organization refrain from replacing old systems. These reasons typically are:

- Lack of sufficient budgets; an organization may choose to implement enterprise applications only in one business area (like HRMS, CRM)
- Some intricate applications cannot be replaced because the complex business functions are not available in new enterprise applications

In a nutshell, integration needs still exist and will continue to exist. An organization needs to leverage legacy systems by bridging them with new enterprise solutions. Only then can it improve business responsiveness.

**SOA – Best of Both Worlds**

SOA is the win-win solution for organizations today. An organization can choose to replace a few old systems with new enterprise applications, like ERP, and still continue to use old systems that cannot be replaced. An SOA solution lays down a strongly founded bridge between the old and new world.

An SOA solution, which is fundamentally based on “interoperability” and “open standards”, utilizes web services that are ‘published’ by an application so that other applications can ‘subscribe’ to and use that service, and vice versa. These applications can work together without relying on custom-coded point-to-point connections. This enables decoupling and enhances flexibility.
Oracle SOA Suite

Oracle SOA Suite is exceptionally well-suited for organizations that are in the process of implementing Oracle EBS to integrate a new solution with their heterogeneous environment. Oracle SOA builds reusable services using Enterprise Service Bus (ESB) and enables business process management using Business Process Execution Language (BPEL).

Oracle Fusion Suite, the best of breed application that will be released next year, is built entirely on SOA architecture. Oracle’s full commitment and support to its customers worldwide, has empowered Oracle SOA to create the possibility of achieving aggressive business goals.

By the end of it, IT departments will be able to control costs and avoid reinventing the wheel.
About the Author

Gaurav is a Senior Project Manager with Oracle SOA Practice of Infosys which provides services using Oracle Fusion Middleware Components. Gaurav has 12 years of industry experience in managing projects that use Object Oriented technologies like J2EE, MS Dot Net, EAI, SOA. He has managed projects at offshore and onsite both handling mid size to large size teams for Fortune 500 customers across the Globe. His role includes managing multiple project teams at offshore and onsite; product scope management; stakeholder management; risk management; and Quality assurance.

He has exposure to various industries like Aviation, Retail and Manufacturing. His area of specialization include project management using quality process frameworks like CMMI-5; ISO; Six Sigma and which he has used extensively in projects. He holds renowned certifications like Sun Java Certified Developer; Oracle Certified Professional, Peregrine Consultant, and QAI PM Certification.

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http://www.infosysblogs.com/oracle/2008/09/six_things_you_must_know_if_your_company_is_ready_and_equipped_for_soa_.html

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