

Cognizant - Integration Strategies

Integration Strategies That Elevate Enterprise SaaS Business Value

Just like small and medium businesses before them, enterprise customers are embracing the software as a service (SaaS) model for applications such as customer relationship management. Many initially moved to a SaaS model to reduce the cost of application maintenance, or to eliminate requirements for more complex onsite infrastructure that a good number of commercial grade applications require. But they often find that the real business payoff comes when they integrate their SaaS applications with other Web-based programs and their own legacy systems.

Traditional on-premise client/server applications often allowed data to be integrated with legacy systems, at the cost of losing or duplicating the business logic and application functionality already embedded in the systems that created the data in the first place. This "integration penalty" is more easily avoided with SaaS applications, which are designed to integrate not only information, but application functionality across the Web.

The dynamic combination of integrated data and functionality, such as mapping or data analysis, is allowing organizations to reduce operating and capital expenses; improve customer service; increase up-sell and cross-sell opportunities; more quickly understand and respond to market changes; and work more closely with customers and business partners.

While great in theory, integrating SaaS and legacy applications isn't pain free. For larger enterprises, it requires complex systems integration savvy and rigorous testing cycles that can prolong project completion. By understanding these challenges and, if necessary, working with an experienced service provider, enterprises can significantly reduce the "time to business benefit" for such integrations.

Integration Benefits

Integrating SaaS with legacy systems takes applications such as CRM to the next level of power and effectiveness. For example, customer service can be improved by allowing a customer service rep to

provision a change in service, issue a refund, make a decision on credit or update shipping status in real-time rather than waiting for a batch process to run. In some cases, organizations can both cut costs and give customers more control over the purchase experience by allowing them to design their own products, or combinations of products and services, online.

However, the more benefit an enterprise hopes to achieve, the more source applications are likely to be involved -- and the more challenging it becomes to integrate Web with legacy applications, the systems of record that hold much of the required data and functionality.

One reason is that traditional application integration focuses on the database level, using tools that allow one application to query or make changes in the databases used by other applications. This often involves the use of familiar protocols such as ODBC (Open Database Connectivity), or calls made by one application into the database used by another. However, applications delivered over the Web communicate at the level of application services, rather than at the database level. As a result, the use of conventional database-to-database tools such as ODBC is either impossible or at best difficult.

Another challenge is that SaaS offerings may only provide support for simple business rules, not the complex logic governing information access, credit, delivery and shipment times, or even underwriting, required by large, complex enterprise applications. Even if the SaaS environment can support complex business rules, duplicating these rules in multiple applications increases maintenance costs and testing burdens. Still another problem is that much of the application functionality required by users may reside outside of the organization at suppliers or other business partners. This means development and testing of that functionality is also outside the control of the enterprise.

All these factors make the design and testing of the integration among SaaS and legacy applica-



tions an expensive and time-consuming task, significantly delaying many of the business benefits companies wish to achieve.

Lessons Learned

In our work with Global 1000 companies we've used several different approaches to work around the challenges of integrating SaaS and legacy applications. Each one illustrates, in different ways, the business benefits of providing more up-to-date information to employees, customers and business partners. Some even allow single employees to complete business functions rather than waiting for a batch process or another employee/system to complete the transaction.

The first, and in our view most compelling, is to create a "mashup" that combines functions from various systems within a single user interface. One example is a mashup we created for a leading telecommunications, media and entertainment company to provide advanced mapping capabilities within Salesforce.com, that create real-time 3-D visual representations of interconnected installations for key accounts. In this case, the mapping capability is provided by Google Maps.

A second approach is real-time application workflow-based data integration. In this case, we move data among applications in real time using hyperlinks or workflow-based Web services technologies such as SOAP - or Simple Object Access Protocol - a Web services mechanism for exchanging XML-based messages. In one project completed for a large provider of global business news and information services, for example, the master customer record is created and maintained in Salesforce.com, but when the customer's status changes from "opportunity" to "closed/won" status, a trigger automatically sends the data to a legacy billing and ordering system that runs on older platforms, including the AS/400.

About Cognizant

Cognizant (NASDAQ: CTSI) is a leading provider of information technology, consulting and business process outsourcing services. Cognizant's single-minded passion is to dedicate our global technology and innovation know-how, our industry expertise and worldwide resources to working together with clients to make their businesses stronger. With more than 40 global delivery centers and 59,000 employees as of June 30, 2008, we combine a unique onsite/offshore delivery model infused by a distinct culture of customer satisfaction. A member of the NASDAQ-100 Index and S&P 500 Index, Cognizant is a Forbes Global 2000 company and a member of the Fortune 1000 and is ranked among the top information technology companies in BusinessWeek's Info Tech 100, Hot Growth and Top 50 Performers listings.

Start Today

For more information on how to maximize your customer relationship solutions with Cognizant, contact us at inquiry@cognizant.com or visit our website at: www.cognizant.com.

Batched data integration is perhaps the most conventional approach we have used, but it is also the easiest and fastest way to integrate SaaS and legacy systems. For example, by batch loading accounts and contacts data into Salesforce.com, we have helped sales people at one of the largest insurance firms to have a 360-degree view of the customers to improve customer retention. Salesforce.com provides a full application programming interface, and its Data Loader tool automates data import and export.

Given the complexity of such projects, even the savviest of enterprises may need help with the strategic planning and actual integration work. Seek a systems integration partner with a proven track record in complex, mission-critical enterprise applications. Look for expertise in high availability environments, large databases, service-oriented architecture, and application integration experience in environments having more than 20 integration points.

Business today is about real-time interaction, responsiveness and quality of service as well as about reducing costs. We've seen only the initial volley of business requirements that can be resolved by integrating SaaS and legacy applications. Effective SaaS/legacy systems integration will help reinforce SaaS's cost-of-ownership advantages and operational flexibility, while extending the life expectancy and business value of legacy systems.

This paper was written by Chris Clegg, Director of SaaS CRM within the Customer Solutions Practice at Cognizant Technology Solutions, Inc. Chris can be reached at Chris.Clegg@cognizant.com



Cognizant
Passion for building stronger businesses

World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European Headquarters

Haymarket House
28-29 Haymarket
London SW1Y 4SP UK
Phone: +44 (0) 20 7321 4888
Fax: +44 (0) 20 7321 4890
Email: infouk@cognizant.com

India Operations Headquarters

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: inquiryindia@cognizant.com