

Why Multi-Platform Strategies

In today's global business environment, the real-time enterprise must support interoperability among multiple enterprise resource planning (ERP) business platforms if it is to meet the dynamic needs for visibility, planning, collaboration and execution in the extended supply chain. But since the introduction of ERP systems to supply chain management, companies have grappled with finding easy ways to implement new business processes and integrate data and legacy systems into their chosen vendor's platform.

Merger and acquisition activity is on the rise and will continue as globalization offers vast consolidation opportunities at a global scale. Even if a platform of choice is made initially, changes might be required as a result of an M&A.

Implementing collaborative business processes only grew more complicated when the enterprise extended outside the four walls of its own operation. At that point, a company wasn't only interested in integrating its own data and legacy systems into its ERP system, but also in integrating those of its trading partners.

The major ERP vendors have an easy solution—make sure everyone is running their platforms. However, shrinking IT budgets make this expensive and complicated proposition unattractive. As ERP systems have added functionality in business process management, they have grown to gigantic proportions, with costs to match. Migrating or configuring new business processes to one ERP business platform is cumbersome, time-consuming and expensive. In addition, the growing numbers of vendors and the need to synch with numerous trading partners have created numerous hurdles on the path to getting everyone to run on the same platform and to speak in the same language.

The Internet has advanced the cause for multi-platform interoperability, with its new languages and common standards like HTTP, XML and SOAP enabling many disparate systems to communicate with each other. ERP vendors have integrated these technologies into their business platforms and extended them even further into supply chain management solutions, creating more opportunities to have a single ERP business platform controlling all aspects of the supply chain. Technology advancements such as Web services and service-oriented architecture (SOA) have become the new rallying cries of these vendors.

But still missing from their picture is the true ability to build service-based applications that can work together regardless of which SOA-based business platform they have been built on and which platform they were designed

to run on. In short, they still lack multi-platform interoperability.

Benefits of multi-platform interoperability

A successful SOA-based platform with multi-platform interoperability is based on the concept of a loosely coupled, service-based architecture and is built using XML as a fundamental basis for modeling business processes, document representation, business logic, events and exceptions, workflows and user interfaces in a unified and integrated environment. Such a platform enables easy plug-and-play of business components, exposure of legacy-systems functionality through Web services, ease of integration, fast reconfiguration of business processes and low cost of upgrades and maintenance.

The i2 Agile Business Process Platform (ABPP) has such multi-platform interoperability. It can access other ERP vendors' SOA-based business platforms and integrate their functionality, regardless of where the functionality was created or where it was designed to run. In addition, i2 ABPP offers users the unique ability to easily bring together data modeling, workflows, business rules, business documents and user interfaces in an integrated design environment.

It addresses some of the core challenges facing organizations coping with the demands engendered by globalization. Problems such as slow responses from IT to address changing business needs, the high cost of managing IT, the inability to reconfigure business processes in a timely and cost-effective manner, and integration of disparate data and applications can all be solved by using the multi-platform approach. No longer does the pace of business innovation have to slow because of changes required in monolithic ERP systems.

Service-oriented architectures make it work

Traditional systems require that business processes adapt to the software or run on the platforms on which they were created. Because a business platform built on SOA with multi-platform interoperability supports extensible workflows that can be tailored to the needs of business processes quickly, it is the software that adapts to the business process, rather than the other way around. This creates a more agile, responsive enterprise.

Each SOA-based business platform from the major ERP vendors has its own areas of strength. The i2 Agile Business Process Platform is in a position to integrate and leverage those other platforms into a single environment

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in order to support supply chain planning, collaboration and visibility. For instance, i2 ABPP can work with SAP NetWeaver,TM oriented toward transaction processing, which is handled by the SAP® R/3® ERP system.

Because both platforms are built on SOA, they can communicate and reuse pre-existing components, thus avoiding costly and time-consuming application development.

The platform is also useful for deploying built-in workflows and industry-specific customization for such vital functions as order management, inventory management and distribution management. How? In this case, the workflow pulls order information from SAP R/3, while the inventory and shipment information comes from a legacy system built in house. The workflow that pulls order information and performs business validations is implemented in SAP NetWeaver, since the source of the data is SAP R/3. The workflow to pull inventory and shipment information is written in i2 ABPP, utilizing the IBM WebSphere® MQ series messaging system to integrate an in-house legacy system.

The workflow to collect all of this information, to raise exceptions on late shipments and to monitor incoming shipments is written into a new business process using i2 ABPP. This eases the overall development cycle, promotes modular development and enforces workflow reuse across different platforms.

The value extends further. The new visibility workflow written in i2 ABPP can become part of the i2 ABPP workflow library, which can be reused later as a building block for another business process.

Additional advantages of interoperability

A few of the additional advantages of a multi-platform approach are:

- It avoids single vendor lock-in.
- It effectively uses the ERP services from ERP vendors' business platforms. Because they are built on SOA, they can be decomposed and exposed as a suite of smaller Web services.
- It shortens development cycles for new business processes because you can take workflows and libraries that were written on one business platform and reuse them with another business platform.
- The reuse of complex ERP functions from ERP platforms and advanced workflows from the i2 ABPP workflow library makes the development of hierarchical workflows easy.
- Best-of-breed platforms designed for ERP systems and for supply chain management can coexist and leverage each other's capabilities.

By producing a business platform that is interoperable with multiple business platforms, i2 continues to actualize the promises of SOA-based platforms and Web services. The result is low total cost of ownership, easy upgrades and, most important, the flexibility of a modular, plug-and-play IT infrastructure that can keep up with the speed of business innovation.

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