IRONSiDE
Technologies Inc.

The Value Of Integration

The Advantages Of E-Commerce Integration With ERP And Enterprise Applications

Incorporating The Internet Into Your Supply Chain

Many organizations now recognize that electronic commerce is a cost-effective and essential means of reaching new markets, increasing revenues, building customer loyalty and decreasing the cost of sales.

Another key advantage of shifting business processes to the Internet lies in leveraging your existing technology investments, so that you can continue business as usual – but do so more efficiently and profitably.

To effectively incorporate the Internet into your supply chain, you need an e-commerce system that integrates seamlessly with your existing order management and enterprise systems to provide real-time, online ordering and information for your customers.

Your host business data and business logic are the result of years of corporate investment in information technology. These business assets need to be extended to the Web in a secure, controlled way to enable you to leverage their value for customers and employees on the Internet or corporate Intranets.

Many electronic commerce solutions provide an "off-the-shelf" features and functionalities, which can be further customized with development toolkits. These products usually require some development work before implementation can be completed.

"The fact that we didn't have to replicate all of the data sitting in our ERP system affords us two very distinct advantages: We rolled out eZone extremely fast; and, most importantly, it enables us to provide our customers with access to truly real-time information."
-- Rick Holden
    CEO
    J.L. Hammett Co.

To achieve real-time transactional capability, however, your e-commerce solution should seamlessly integrate with your host order management system using a gateway developed specifically for that host system.

In this way, your e-commerce solution can provide a sophisticated interactive on-line service to customers. These services can include order entry, order status, request for quotation, inventory availability, product catalog, special offers, and e-mail communications.

The Benefits of An Integrated Solution

Leverage Existing Technology

Tight integration enables you to leverage your existing investments in host hardware and software by allowing business applications and data to be extended to the Web. Current and future compatibility with corporate business systems, and support for a wide range of client browsers can also help lower your total cost of ownership.

Leverage Legacy Data

Rather than having to rewrite business logic or duplicate data, an integrated solution does not require a duplicate server to mirror all of the host information, as is the case with some electronic commerce solutions.

This can result in a significant savings in server utilization and staff time, enabling your organization to get an on-line ordering system up and running faster and more cost effectively.

Speed To Market

One of the most important competitive advantages for organizations is time to market. The average ground-up development and implementation time for an e-commerce system can be as long as 18-24 months, while implementation of a packaged and integrated solution can be a little as one to four months.

A solution that integrates with major ERP systems such as SAP, J.D. Edwards, SSA eBPCs, JBA and Prism as well as customer back-ends increases the speed as which you can deploy an e-commerce solution and automate key business processes to reduce costs and increase revenues.

Rapid time to market and quicker ROI from your e-commerce investment also frees up corporate resources to focus on core competencies and value-added customer service capabilities.

"The real-time online functionality provided by Ironside was key in our decision to use it as the foundation of our e-commerce strategy. When you compare its order processing functionality with the old "store and forward" method we had in place, its really like night and day."

-- Craig Simpson
   VP Information
   Technology
   Serca Foodservice

Real-Time Transaction Processing Improves Accuracy

By choosing an electronic commerce system that integrates directly with your MRP/ERP order management system, you can provide your customers with a real-time order environment.

That means the pricing and inventory information your system provides to customers and business partners is completely up-to-date and customer specific.

When customers place an order, it's automatically deducted from current inventory. If the product they want is out of stock, they'll know it immediately and can order a substitute. They'll also know when the product is shipping, and whether their full shipment will arrive, without picking up the telephone.

In addition, orders are significantly more accurate when they're completed by customers. This can result in 35% -50% fewer returns,

less chance of misinterpretation over the telephone, and fewer errors during the order entry process. "Getting it right the first time" is huge plus when it comes to customer satisfaction.

Your integrated e-commerce solution should provide real-time transaction processing for:

- Order entry
- Quotations
- Order status
- Inventory and pricing availability, including Availability-to-Promise (ATP)
- Product inquiry
- Promotions and catalog content
- E-mail communications
- Hierarchical searching and more

Optimized Supply Chain Efficiencies

Seamless integration with back-end enterprise systems allows manufacturers and distributors to keep inventory low, thereby reducing overhead, and it enables you to sell in-demand products at more attractive prices. Importantly, this combination of low inventory and better product demand speeds inventory turnover and drives strong, regular e-business activity.

More Efficient Use Of Internal Resources

Technology skills are rare and expensive. By attempting to build an e-commerce solution in-house or doing the integration work yourself, you will need IT staff with significant training and experience in client-server development, Netscape and Microsoft browser development, Java, HTML, SGML, gateway development programming, plus MRP/ERP programming knowledge.

By selecting an e-commerce solution with pre-written integration to leading ERP platforms, you can avoid having to add to your IT staff and instead devote internal resources to activities related to your core business competencies.

Customer Reaction To Integrated E-Commerce Solutions

With nearly £1 billion in annual revenues, Brake Bros. PLC is one of Europe's largest foodservice distributors, holding dominant positions across the United Kingdom and France.

"(Our integrated solution) will work with our ERP database to give customers the data they want over the Internet. It will give them immediate access to information, such as the status of their order or account information, on a 24x7 basis. This not only will enable Fox River to fulfill their needs without unnecessary delays. But also will let sales people be more consultative, spend more time selling, and reduce sales-related paperwork."
-- Brad McCarville
   Director of E-
   Commerce Strategy
   Fox River Paper

The company also operates one of the world's largest SAP/R3 sales and distribution systems. Executives at Brake Bros. expected that extending their enterprise systems would be a costly and lengthy proposition—similar to the ERP implementation itself. But because Ironside Technologies offered pre-packaged integration for the SAP R3 platform, time-to-market was rapid.

According to Steve Parish, Brake Bros. Information Systems Director, "We went from whiteboards [the initial process-flow stage] to rollout in just over 90 days. It's quite extraordinary for the SAP platform, which is extremely complex and highly customized." Brake's Ironworks for SAP implementation was rolled out as a pilot to sub-set of its customers on May 23, 2000. The company accepted its first Ironside Powered transaction the very next day.

Checkpoints For Ensuring Seamless Integration

✓ **Pre-Written Integration**

"ERP systems aren't easy to use. Customers can't be expected to learn J.D. Edwards for us, or SAP, Baan or PeopleSoft for other companies. Ironside addresses this problem by providing a simple-to-use front-end that accesses the complex backend system and navigates through it with incredible ease."
-- Frederik Wenzel
   Executive VP
   Finance and
   Administration
   Weidmüller Inc.

Pre-written integration to leading ERP platforms such as SAP, Oracle, J.D. Edwards, SSA eBPCS, JFA and Prism can dramatically reduce the cost of implementing a solution and enable your e-commerce site to be up and running in weeks, rather than months. In addition, your solution should integrate into other proprietary and non-proprietary business applications such as CRM, SCM and Logistics systems.

✓ **Open Architecture**

E-commerce is only one aspect of your e-business initiative. It should not require that you implement it as another standalone business system. Instead, your e-commerce implementation should facilitate an enterprise wide approach to e-business, giving you the ability to integrate e-commerce with other existing enterprise applications.

Therefore your e-commerce solution should provide an Open Architecture that enables you to integrate it with the full spectrum of enterprise business applications, from store-front to the back-end, and to tailor your business-to-business e-commerce solution to meet the unique needs of your business.

✓ **Internet Standards/Platform Independence**

A great deal of development effort has been, and will continue to be put into the development of Internet technologies – making it easy, convenient and productive for vendors and customers alike. Of those technologies developed with real impact on the Internet, the Java™ development platform by Sun Microsystems stands out as the de facto

standard in platform independence. Adherence to Internet standards and the Java programming language ensures that your e-commerce solution is compatible with Internet technologies and platform independence.

✓ Enhanced Response Times

Another advantage to the use the Java programming language is the ability to create "ultra-thin client" technology that ensures that initial access to the application is recorded in seconds, not minutes, even when accessed through slower, dial-up Internet connections.

✓ Support For Multiple Host Gateways

While many e-commerce implementations need only utilize a single gateway to provide the real-time integration to ERP systems, an optimal solution would provide the ability to connect to multiple instances of a host gateway. These gateway instances run on a single host or can be distributed across multiple hosts. These feature provides a number of important benefits:

- Scalability, to support growing numbers of end users wishing to access the e-commerce system, or to support an expanding back-end business system;
- Load balancing, allowing your e-commerce system to distribute users to multiple instances of the host gateway on a single host and to multiple hosts;
- Hot backup of your main host, improving system performance and improving the reliability, availability and serviceability of your e-commerce solution.

Other Areas Of Integration To Consider

Integration With Customer Preferences

Quite simply, the fundamental goal of any e-commerce solution is to connect buyers and sellers via the Internet. To that end, your e-commerce system should give you the ability to seamlessly connect customers through virtually any channel they prefer to use -- Web browsers, Web-enabled wireless devices, eMarketplaces, procurement networks, and ERP-to-ERP transactions. It should serve as a conduit to new Web-based distribution relationships.

Integration With e-Marketplaces

eMarketplaces are changing the way companies do business online. However, many manufacturers and distributors feel that it is still too

early to pick the winners in the e-marketplace race, and are reluctant to commit extensive resources and time to integrate with a particular e-marketplace.

Therefore your e-commerce solution should give you the ability to access multiple e-marketplaces, and add or delete e-marketplaces at will, providing you with the maximum flexibility at this early stage in their development.

Integration With Marketing Communications

In addition to the benefits of reduced costs, increased revenues and improved customer service, an integrated e-commerce solution should be able to provide your company with significant additional revenue and customer service opportunities through personalized, 1-to-1 online marketing opportunities.

These range from customer-specific online catalogs, special promotions and easily updated Web-based sales materials that keep customers aware of product and service information relevant to their needs.

"Each day lost to implementation is potential revenue and customer satisfaction forgone."
-- Harry Hastilow
   Director of IT
   Mother Parker's
   Inc.

In Summary...

It should be clear that integration with your existing enterprise systems is one of the crucial elements for the successful implementation of an e-commerce solution. The ease at which this can be accomplished can provide your organization with a number of benefits:

- Cost savings
- Less disruption of current business
- Greater speed of implementation
- Real-time information and improved accuracy
- Enhanced customer service and satisfaction
- Improved inventory control
- Reduced workload/strain on internal resources

For more information about designing an optimal e-commerce solution for your organization, please contact Ironside at **1-800-495-IRON** or visit **www.ironside.com**