

Integration is key to making the most of KM

- [Kim Ann Zimmerman](#) of KMWorld Magazine

EAI ties together knowledge from legacy systems, customer databases and more

By Kim Ann Zimmermann

Enterprise application integration (EAI) is being used as a knowledge management strategy, tying together critical bits of information gathered from various systems throughout the enterprise. EAI systems must link with legacy systems, databases, the Internet and e-commerce.

All of the information far-flung across the enterprise and the need to communicate with outside firms make enterprise application integration tools all the more valuable to managing knowledge effectively.

“EAI is dead in the sense that no one is interested in the term by itself,” says Ken Molay, director of strategic marketing for [Fair, Isaac](#), a provider of business analytic software for credit scoring and customer relationship management with an enterprise integration component. “The key is the real-time decision-making that EAI allows. With EAI, the question of what task is next or what business process to invoke in a particular circumstance is much more automated.”

Molay points to an example in the insurance arena. “The idea is to have one standardized XML-based system to capture information on every person applying for a policy,” he says, “but there needs to be some customer-driven information as well, based on some of the responses. With EAI, there is the ability to tie those additional inquiries to specific business requirements. For example, if a customer is looking for coverage in Florida, the insurance company might want to ask if there is window tinting, but if the car is to be insured in upstate New York, the applicant might be asked about corrosion protection,” he says. While EAI helps individualize the process depending on the customer’s initial response to basic information (such as geographic location), standard sets of data are required of all applicants.

Fair, Isaac’s EAI strategy, according to Molay, is to provide access to information at the point of decision. By integrating with customer historical data, product data and profitability models, decision-makers are provided with one point of access to the knowledge to make an informed decision.

Like insurance companies, retailers are prime candidates for EAI systems, because they have an inherent need to combine a number of systems such as point-of-sale, order entry and financials, and the need to access historical data from outdated systems to make year-to-year comparisons. The key driver, according to Paula Rosenblum, research director in [AMR Research’s](#) Retail Industry Service, is the low cost of EAI as well as the ability to integrate quickly and easily.

“The primary reason that one major multichannel retailer purchased an EAI server was to ease the integration effort required to connect the external application to its legacy system,” Rosenblum notes. “In the 18 months since it installed the EAI server, the company has connected more than 30 systems with the tool. It is currently replacing the user interface to its order entry system, but leaving parts of its legacy system intact. EAI will hook those applications together, relieving the cultural pain of migrating

from one system to another, since features of its legacy system will remain available, even after the new system is implemented.”

EAI vs. ETL

Many organizations are addressing knowledge management needs with a variety of integration solutions, EAI and extract, transform, load (ETL) tools, which can be used to acquire a temporary subset of data for reports or other purposes, or a more permanent data set to populate a data mart or data warehouse or migrate from one database or platform to another.

According to [Knightsbridge](#) CTO Faisal Shah, many organizations are tempted to address all of their integration needs through just one type of tool, but that can be a mistake.

“What we’re seeing at least on the internal data management and knowledge management level is a competition between ETL and EAI. People get stuck on speeds and features as opposed to what it's going to take to get real business value out of this knowledge that is stored in the organization,” Shah says.

Integrating your knowledge systems is a matter of finding the right tools for the right job, Shah points out. EAI is more process-centric, while ETL is more data-centric.

“The EAI view of world is that I have this business process--add new customer, book new order, change this customer’s address. All processes that one does that affect certain objects,” he says. ETL’s strength is in collecting and organizing data.

Industry-specific EAI

Shah notes that it is important that EAI and ETL tools be based on industry standards, such as EDI (Electronic Data Interchange) and the HIPAA (Health Insurance Portability and Accountability Act) in healthcare.

For example, [SeeBeyond](#) recently upgraded its integration to meet those and other industry-specific standards, as well as the National Council for Prescription Drug Programs (NCPDP) Batch 1.1 and Telecommunications 5.1 standards.

[AvMed Health Plan](#), Florida's largest not-for-profit health plan, has implemented SeeBeyond’s Business Integration Suite to help meet all HIPAA transaction requirements.

“SeeBeyond's integration solution allows AvMed to seamlessly connect and access essential information,” says John Higbee, VP and CIO for AvMed Health Plan. “The exchange of critical data has become an important factor in bolstering customer satisfaction while keeping administrative costs under control.”

AvMed integrates a number of systems, applications and technologies including the AMISYS Managed Care system, an imaging and workflow system, databases and Web and FTP servers.

Fair, Isaac’s Molay says the healthcare industry is becoming a heavy user of EAI.

“They are tying together huge numbers of applications,” he says. “Systems for admission of patients have to be tied through to back-end processes. Then there are specific requirements as to how that information is passed back to the provider. There are kinds of integration points—front-end, clinical, claims and reimbursement.”

KM firms add EAI

While EAI companies have developed a niche, KM companies such as [FileNet](#) and [Optika](#) are adding EAI tools to their offerings. FileNet offers Brightspire, a business integration framework for applications such as e-procurement and collaborative selling.

Optika's recent release of Acorde 3.0 provides integration capabilities for Microsoft Business Solutions applications. The Microsoft Business Solutions channel-certified integration has been extended to include the ability to update its Great Plains application with information stored in Acorde. That allows customers to use the Acorde Process component to gather necessary information about a specific invoice or purchase order and then push that information back into the Microsoft Business Solutions Great Plains application. For any customer in a distributed environment, that functionality is crucial to lowering costs and improving cycle times.

Monsanto puts a friendly face on hard software

The back office isn't the only battleground in the EAI space. Sometimes integration can occur at the final mile—on the user's desktop where he or she directly interacts with the application.

[Monsanto](#), for example, shares a common problem with many process manufacturers: Engineering software is hard to use. Complex applications—already expensive to implement and train users—often become the domain of a small group of “experts,” therefore reducing the overall value of the application to the enterprise. To make matters worse, collaboration is stifled because team members outside the small circle of experts can't operate the application. And overall productivity suffers because of the imbalanced demand on the experts' time.

Monsanto faced those challenges in its agricultural chemical group. Denny Hayek, process engineering manager for Monsanto, remembers, “Then we heard about a new development environment that lets experts wrap simple Web-based GUIs around any application without having to know a programming language.” Now, far more engineers can use the various applications that had previously been limited to the subject matter experts.

Monsanto worked with engineering software developer [AEA Technology](#) to use its Enterprise Accessible Software Application (EASA) to create a series of application libraries that are available over the Monsanto intranet, thereby extending their accessibility to authorized users throughout the enterprise. After a short trial, they rolled it out to the engineers.

“We determined that this application has the potential to significantly increase the productivity of our engineering group by making programs more accessible to our younger engineers,” says Ed Casanova, manufacturing technologist for Monsanto. “We also like the fact that it doesn't alter the underlying code, so there is no need for revalidation.”

In Monsanto's case, the interfaces are created by the subject matter experts—taking between one and a “couple days,” says Casanova. “Having the subject matter expert actually do the interface is a big advantage because he understands far better than a programmer how to make things easy for the user,” he says.

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