

&gt;&gt; Home &gt;&gt; Strategy

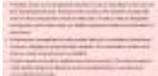
**STRATEGY**[Deutsch](#) | [English](#)**12.05.2003 / EAI Forum 2003:**

## From application integration to process integration

**Business integration was at the forefront of the EAI Forum 2003 from March 31 to April 3, 2003 at the Rheingoldhalle in Mainz, Germany. For five years, the forum has been an information platform for users and experts interested in finding out more about the latest developments in application integration. The presentations were divided into the four categories EAI organization and projects, EAI technologies, Web Services and EAI tools, and industry-specific solutions. What are the current aims of business integration, and what stage has the market reached?**

"Information at your fingertips" – the aim is to make the right information available at the right time and place, for the right purpose. Business integration is the umbrella term that covers the necessary technologies and methods: integration at the level of data, applications, processes, and employees. With this approach, the long hoped-for "real-time company" can be realized – a company that can be contacted any time "online" and has integrated processes not just across department boundaries but also with trading partners, vendors and customers.

In the Nineties, applications were designed to be functional. However, processes cross the boundaries of individual functions and departments. As a result, the first task in business integration was to integrate data and applications within companies. This became known as "enterprise application integration" (EAI). Today business integration is all about managing processes and their performance. The tasks of the future are also clear. Using portals, the aim is to integrate human interaction into the processes. In addition, collaborative business processes must be established with trading partners, vendors and customers across enterprise boundaries.



Selecting the provider

### Innovative processes enable innovative business models

The journal "The Info-Economist" rates Dr. Wolfgang Martin as one of the 10 most influential IT consultants in Europe. He specializes in the reciprocal effects between technological innovation and organization, corporate culture, business architectures, and business processes. At the EAI congress, Martin led the presentations for "EAI – Organization und Projects."

- Herr Martin, what is the benefit of integration?

Martin: New, innovative processes enable innovative business models. A good example here is Pirelli: the company offers to manage the stocks of its largest distributors. As a result, costly and time-consuming order transactions are not necessary. The ROI for such projects depends on the business value of the cross-department or cross-company processes.



Collaboration at Pirelli

- What pitfalls does a company need to avoid in integration projects?

Martin: Current business processes should never be mapped one-to-one.

- How can the executive board of a company evaluate the benefit of an integration project?

Martin: As a rule, an attempt to justify EAI by citing technical or architectonic improvements will generally fail. The benefit of a project of this nature can best be evaluated using cost-intensive business processes for which the throughput volume and speed are increased through integration and automation.



Organization and realization

- Integration is an extensive subject. How can a company ensure that the focus of an integration project is not lost?



Martin: Integration requires a strategic approach, but should be implemented tactically in smaller, faster projects. An EAI competence center is a very useful organizational construct for managing a variety of integration tasks and requirements.

Strategies  
and  
business  
models

- How can a company win acceptance for collaborative processes among distributors, vendors and customers?

Martin: The decisive point is to create and emphasize "win-win" situations. A company that will profit from integrated processes and cost reductions must also offer its distributors advantages and incentives.

### **There is no single formula for the "best" EAI architecture**

There is not just a whole range of different providers for integration tasks, however, there are also various approaches to the solution. So what is the most suitable architecture for an EAI project? Jürgen Sellentin, manager for the subject of integration architectures at the DaimlerChrysler Research Center at Ulm and leader of the second group of presentations, "EAI Technologies and Web Services," explains that no single answer to this question. According to Sellentin, a qualified computer scientist, it is obvious that a clearly defined architecture is absolutely essential, and that the implementation of this architecture needs to be controlled. With regard to future modifications or enhancements, a company must be sure to document the data model and process model accurately. Sellentin advises intensive communication with partners, because without a common understanding of the procedures and the data that needs to be exchanged, the systems of several partners can not be linked up effectively. It takes considerably more effort to iron out modeling errors at a later point in time.

- What role do Web Services play in EAI?

Sellentin: Web Services will be or to some extent already are a technical part of EAI solutions. This trend can be clearly seen. The available products have become far more sophisticated recently. The group of presentations raised a number of questions on the issue of Web Services. Who operates which service? Is the service billed for? Questions such as this are one of the reasons why only very few EAI projects have been implemented with Web Services as yet.

- Do Web Services reduce the effort for EAI solutions?

Sellentin: Calculated across all the tasks involved in an EAI projects, Web Services do not considerably reduce the overall effort, because around 75 percent of the effort is not affected by the technology used. A good EAI solution requires clearly defined processes and organizational structures. Frequently, the current situation must be evaluated before the target situation can be modeled at all. The issue of technical implementation can only be addressed after this has been done. In individual cases, Web Services then do have the potential to offer significant improvements.

In a round of discussions with the most important manufacturers of EAI tools, questions on the subject of Web Services were also put to Richard Nußdorfer, who has been working as an IT consultant for 25 years:

- How do Web Services affect integration projects in practice?

Nußdorfer: Within total business integration (TBI), Web Services are standardized and functionally enhanced – they serve as the interfaces for software components and act as the basis for a service-oriented IT architecture.

### **EAI a basic prerequisite for B2B**

In integration projects, Nußdorfer differentiates between three stages: integration within the company at application level (application-to-application), application integration between companies for B2B

processes, and total business integration.

- What is important at the level of the internal integration of applications?

Nußdorfer: EAI consists of 10 basic functions, and of these, the modeling of business processes has the highest priority. It is also important to ensure that the applications are integrated within the company – this is a prerequisite for successful B2B processes. In relation to the overall integration project, the integration of internal company applications has a weighting of 80:20 percent.



Within the company, the integration of legacy applications is still the most important topic. The related connector problem can be solved with modern screen interfaces or alternatively with API interfaces, as in the past.

- Why is EAI not already yesterday's news?

Nußdorfer: Integration is indeed yesterday's news, but achieving it has never been as easy as it is today – thanks to new tools. However, what makes it relevant today is above all the cost aspect. Almost every manufacturer of EAI solutions now offers low-cost options for connecting up partners, including options for medium-size companies. An evaluation of the ROI is a must before the project starts – together with a realistic assessment of the tasks and the performance of the tool concerned.

- What are the most important requirements that integration solutions must meet for B2B processes?

Nußdorfer: The key word here is straight-through processing (STP) – cost reduction within the company achieved through automated business processes is one of the most important results of an integration project.

- Why is it necessary to view TBI as a complex task that affects the whole company?

Nußdorfer: In practice, it is very difficult to draw a line between the individual tasks, and therefore it makes sense to look at the tasks as a whole before the project starts. However, companies should also take a tactical approach to integration projects, and start with a small but practical task.

## Potential savings of up to 75 percent depending on industry

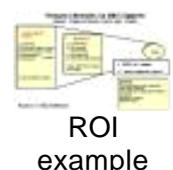
Professor Dr.-Ing. Klaus Thaler, leader of the EAI industry forum explains whether there are industry-specific differences between integration projects and their importance. Thaler was appointed to the newly founded chair of process planning and simulation at the University of Applied Sciences in Stuttgart, Germany in April 2002. He lectures on IT applications, works as an independent consultant in industry, and is regarded as an expert in process optimization.

- In which industries is EAI important?

Thaler: Regardless of the industry, heterogeneous back-office and front-office systems that have evolved over time – sometimes monolithic applications from the Seventies with many interfaces – are characteristic of the system landscape in many companies. Communication and data interchange often take place via very specific standards. This is particularly true of banks, insurance companies and service providers, but also of many production companies and retailers. In the EAI industry forum, pilot applications from all of these industries were demonstrated.

- And what did the industries achieve with EAI?

Thaler: The potential for saving is particularly high when many different systems are merged in a process. For banks, insurance companies and service providers, the potential of EAI is put at around 75 percent of the total data processing costs. Even if this figure appears somewhat optimistic, the maintenance and modification of system interfaces makes up the largest proportion of costs today in integration. In the financial sector, for example, the future scenario of a



"one stop financial supermarket" is increasingly becoming a consideration. Industries such as retail, production and financial services are moving closer together, and are learning from each other.

- Where are the stumbling blocks for EAI?

Thaler: Legacy systems are often difficult to handle. To achieve genuine process integration, efficient processes must be created from the actual processes, and the company must be converted into a real-time enterprise. At Storck, a company in the confectionary industry, a packaging manufacturer was connected to the Storck portal from TIBCO and the SAP R/3 backend system. When packaging materials were then ordered from the catalog, the average ordering transaction was reduced from 20 minutes to just five.

- How important is the feasibility study and the transfer of existing standards in EAI projects?

Thaler: The feasibility study for EAI projects is becoming even more important, as it is necessary not just to locate savings but also to reduce the total costs in the supply chain together with customers and vendors. In application projects, there is general agreement that a company should continue to use existing standards.



EAI at AUDI



**Lüder Schulz-Nigmann**