

A professional woman with blonde hair, wearing a beige blazer over a striped shirt, is seated at a conference table. She is holding a white document and looking towards the camera with a slight smile. In the background, two other people are seated at the table, working on documents. The setting appears to be a modern office or conference room with large windows.

## USoft Product Information Back Office Integration

## Usoft Back Office Integration

You're on to the New Economy – Why Look At Your Back Office Now ?

Getting on the Internet is important for your organization. A web site that looks great, is fast, and can easily be found is of the essence – so what you need first are good graphic designers and web site managers. Your concern is to generate repeat site visits by offering rewarding shopping or visitor experiences. To process and store data coming in from your web site, you have your databases, information systems and well-trained employees all in place. So why worry about integrating your back office systems? And what is back office integration anyway?

### Internet Technology is *New* Technology

The Internet is still a relatively new medium, and so is all the technology that makes it possible. Internet applications exist next to existing information systems until you do something about it. Somebody somewhere picks up orders entered by Internet customers and processes them manually, perhaps even re entering them into some existing system. Clearly you want some way of integrating it all.

### The Next Logical Step

Funny how one thing leads to another. As businesses are realizing they will all be e-businesses soon, because they really don't have a choice, a number of combined effects point in that same direction of back office integration:

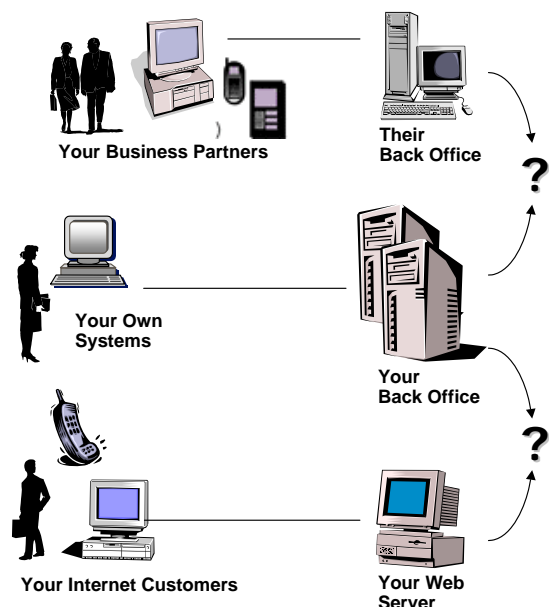
#### The Legacy Scare

We've seen it all before. The Internet is not the first technology shift to create yet another layer of information systems that's too expensive to dismantle or throw away but does not cooperate easily with newer systems. We witnessed client/server computing and Enterprise Resource Planning (ERP) do just that. This time, integration with existing systems must be a conscious effort.

#### End-to-end Automation Sooner or Later Requires Business-to-Business Automation

It depends a little on what you sell, but the Internet is the first platform where you can let your customers do a lot of things without dealing with them personally.

Crucial technology such as unique customer credit card numbers and related security is already in place. The blocking factor is business-to-business communication. The Internet may technically allow your customers to order a lot of the same product at any time of the day or night – but to really benefit from this opportunity, you need to automate stock replenishing as well, and it's harder because your business contacts cannot be reduced to card numbers. Similar problems arise for companies selling services or non-stockable products.



**Evolution Will not Stop Here**

Current Internet and mobile commerce solutions will soon be replaced by different, newer technology.

We believe evolution will be fastest at the front end (the mobile phones, Internet browsers and palmtop computers), not in the back office (your databases). That's why we put your back office into permanent order before realizing front end interfaces.

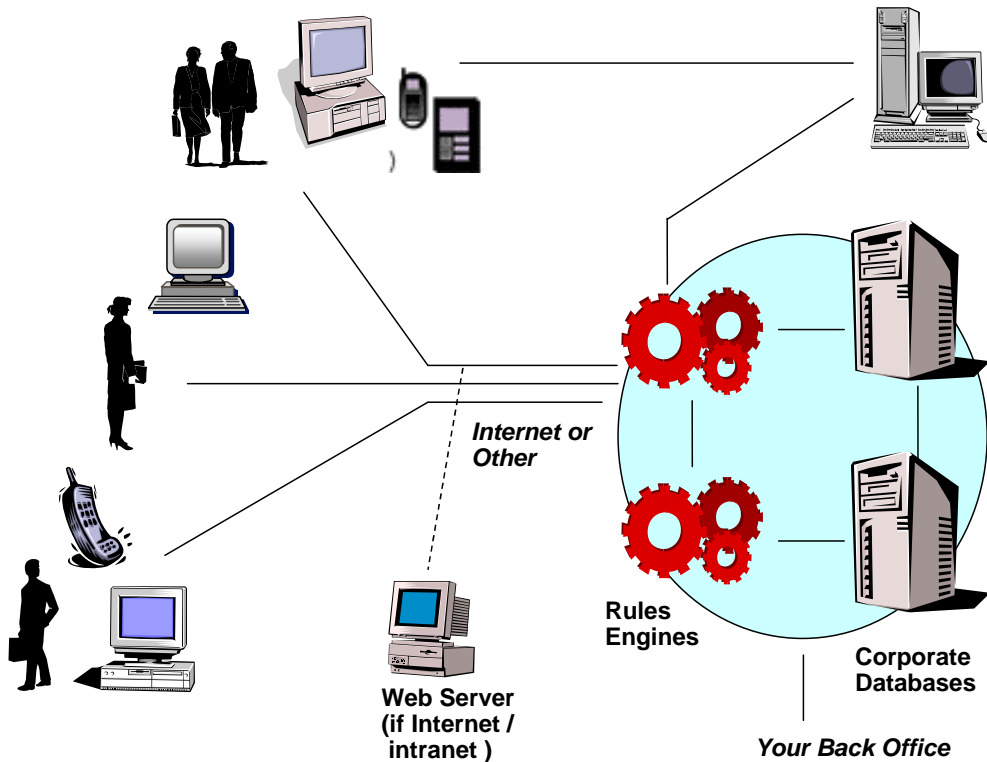
**Our Solutions**

USoft technology platform delivers future flexibility by taking centralized business logic as its starting point. Integration projects are tackled by using a mix of strategies:

*Application and database integration* - making different systems work together. You can continue to use existing systems you have invested in, without needing to change them in a fundamental way.

*Open data exchange* - making systems exchange messages they can both understand. The great advantage of this strategy is of course openness to others, now and in the future. USoft embraces the emerging open standard for business data exchange, XML.

*Re-engineering* - converting part of your existing system to a new technology such as USoft. This may seem radical, and it can be, but USoft automates part of the process by offering bridging tools. Re-engineering results in optimal solutions for the future, with a low cost of ownership.



USoft Back Office Integration

## Why Business Rules?

By now you may well wonder what business rules have to do with any of this. Business rules technology focuses on *how things currently get done in your organization*. This ranges from how customers get discounts under certain conditions, to what checks are required before a deal can be closed.

Focus on business allows USoft to deliver the greater part of a system independently of how you are going to *use* it: via the Internet, an in-company intranet solution, a link to business partners ... With USoft, your business processes do not disappear in technical code but remain on the surface. This has many advantages, one of which is that they can easily be *adapted* if the way you do business changes – as it always does.

- Business rules are by their nature independent of visible system components (screens, mobile phones): they were positioned in the back office 10 years before anybody started talking about back office integration.
- Business rules (and this is a technical but important subtlety) are highly *modular*. What we mean by this is that USoft lets you add, change or remove rules without worrying about the consequences for the rest of this system. As you can imagine, this makes it easier to integrate new USoft rules and rules buried in existing (maybe ERP) systems you may have, without making expensive alterations to those systems.

USoft has specialized in business rules technology since the mid 1980s, featuring highly flexible (adaptable) solutions as well as rapid, intuitive software development methods. In more recent years it has invested in co operating with third-party tools such as componentware, Java and ERP solutions.

Advanced message queuing and a powerful data exchange standard (XML) have now arrived on the market and are used by USoft for open, rules-based data exchange.

### Case 1: SAP integration

#### The Problem

In the 90s, a health authority automated all their business processes using a standard SAP solution. The rules of how they work with GPs and pharmacists have recently started to change, both because of new legislation and changing organizational structures and responsibilities. It is not as easy to adapt the SAP solution to these changes as everybody would wish.

#### The Solution

USoft leaves the SAP system in place, provides the new functionality in a small custom-built system, and calls on the SAP system whenever it needs data from it or when it needs to pass data to it. Although the existing system has not become more flexible, the new extension is highly adaptable. (*Application Integration*).

#### Why This Solution?

The determining factor in choosing this solution was to safeguard the important return on investment in the SAP implementation.

#### How USoft can help you

##### **Integrate Your Web Site**

Make sure your web site cooperates with your Information systems.

##### **Avoid Back Office Complexity**

Don't create yet another layer of new technology on top of your existing data and systems.

##### **Automate Business-to-business Communications**

Internet customers now order themselves directly. Does your information system let you do the same thing when you talk to your partners?

## Case 2: Data Exchange

### The Problem

A media company sells online use of images, photographs, audio, video and film fragments (referred to as assets) to publishers, television companies and companies with web sites. Each time an asset is used, a complex set of author's rights must be complied with. Makers and performers are paid a percentage based on contracts that keep changing and expiring and also vary between asset types, countries, consumer categories, and other variables.

Requests to use a video fragment or other asset can be placed from any Internet browser. Once artist's rights and other conditions are met, the fragment becomes downloadable from a multimedia database.

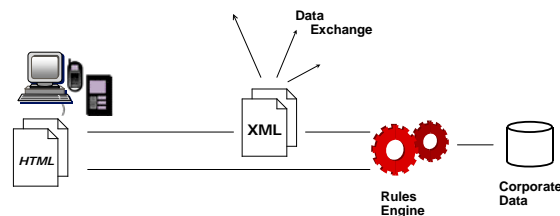
Data exchange between USoft and various other parties is required. Both the video producer and the artist must be paid before the asset can be made available for download.

The reality is that the various parties involved in this process have different platforms, databases, middleware and applications. This is true of most types of business-to-business communication, including automated supply chains and distribution schemes.

### The Solution

A USoft adaptable rules engine implements the volatile artist's rights arrangements, including electronic payments. The multimedia database is an extension of the database used by the rules engine. A USoft ready-made solution or template is used to give the project a head start.

XML is used to communicate with other companies involved. Standards for communicating about, say, the artist's rights for a video clip are established once between the trading parties, laid down in XML, and from then on partners can read each other's incoming XML messages. (USoft Template Solution and Database Integration, combined with Open Data Exchange.)



XML and Rules Engines in an Internet Environment

### Why This Solution?

The branch-specific template allows experience from similar projects to be re-used, whilst at the same time business rules technology allows maximum customization.

The audio and video database and the author's rights database can be integrated at data level. This offers high security as well as a high level of independence from front ends.

The open data exchange solution is chosen because media partners are likely to change often. Application integration is therefore not an option.

## Case 3: Umbrella Solution Fuelled by the Internet

### **The Problem**

A textile manufacturer has about 20 different databases and related applications, basically one for each department. The databases are separate, but there is data duplication and clear business relationships between them. Some databases are recent and others nearly 20 years old.

The customer wants to move to an integrated in-company intranet where most applications can be accessed by most employees. Plans already exist to open the door to Internet customers, too. Instead of building an Internet umbrella layer around the colorful collection of existing office systems, is this a good time to consider back office integration?

### **The Solution**

After a pilot study, most of the scattered business data is converted to a central database by one of USoft's bridge tools (though in places, integration is achieved by using database vendors' data distribution features). For selected application areas, existing interfaces are dropped, a business rules engine is defined, and USoft WebRuler intranet browser interfaces are designed.

*(Re-engineering, Application and Database Integration, and Web Enabling.)*

### **Why This Solution?**

Advantage was taken of the opportunity to clean up and combine business data and optimize processing.

USoft Web Designer produces highly adaptable intranet applications without requiring any Internet programming skills. This solution was possible here because user functions were largely related to data entry and end users were in a position to receive a minimum of in-company training.

The resulting system is open to future Internet developments, in which case no further re-engineering is needed since business rules are now positioned in the back office, not in intranet applications, and therefore apply automatically.

## Summary

Back office integration is needed because of legacy systems, but is also closely related to Internet developments.

USoft business rules technology is well-placed to perform back office integration. USoft applies a mix of integration techniques appropriate to your individual situation.

The resulting system features high future adaptability, not only at database, business logic and interface levels, but also in business-to-business communications.