

## Overview

Joven Technology provides cost-effective Laboratory Relationship Management Software Systems for commercial and producer testing laboratories of all sizes. Our Web based hosted application allows our customers to use the Internet to better reach and interact with their clients. This provides around-the-clock availability of critical client information while reducing the cost of client service transactions. These systems can generally save the laboratory more than 60% of the cost of “Doing it themselves”.

Our latest product is Quasar, a *Laboratory Relationship Management Software (LRMS)* system. **Quasar** is a full-featured web-based application that enables labs to use the Internet to better reach and interact with their clients. In addition to licensing Quasar to its customers, Joven Technology also offers Quasar on a hosted basis (that is, Joven Technology ASPs the Quasar software for its customers).

## What is a “Hosted Application”?

A hosted application is one that is offered to customers on a subscription basis and includes all the information technology (IT) infrastructure (hardware, software) and support services (IT staff) necessary to deliver them. Applications are typically hosted at a data center and accessed over the Internet or a private network. The use of hosted applications eliminates the costs and complications of traditional client server software while providing the most current application software along with the latest in technology and security.

## Benefits

- \* Instant and continuous access to the latest technology you need to run your business - without the risks, costs and administrative responsibilities associated with developing and maintaining the required IT infrastructure.
- \* Improved ability to focus resources on core business issues, rather than IT concerns.
- \* Faster implementation of new applications and technologies - with reduced risk to your existing systems environment and bottom line.
- \* Ability to scale and deploy rapidly to meet growing business needs.
- \* Access to comprehensive security, back up, disaster recovery and support services.
- \* Access to applications without the burden of maintaining a distributed computing environment.
- \* Eliminate the purchase, installation, upgrading, and maintenance of software and hardware.

## Features

The **customer** of a hosted application

1. Owns their own data
2. Focuses on their business, not on software operations
3. Pays a small part of the total cost for the application, hardware, system support and upgrades
4. Subscription fee is either on a per-user basis, a monthly/annual fee basis or a combination

The **provider** of the hosted application

1. Owns, operates, maintains, and supports the software application.
2. Does not own the customer's data.
3. Owns and operates the servers that run the application.
4. Employs the people needed to maintain and enhance the application.
5. Makes the application available to customers everywhere via the Internet, typically through a browser.

**FAQ's Regarding Hosted Applications**

*How do I access the software?*

Applications are instantly accessible through a web browser such as Internet Explorer

*Who owns the data?*

You do! Customers own their data. All data is archived and can be retrieved upon request.

*How secure is my data?*

One of the benefits of working with a hosted application is having access to the latest in security technology. The service provider has the equipment, applications, and expertise to apply the latest practices guaranteeing superior levels of security, backup, and disaster recovery. Security assurance measures include a best of breed, three-tier system, which utilizes both physical and virtual barriers. Security measures are in place at all levels of service: security for the network firewall, application security, customer security, and user security:

*What happens if a server goes down?*

The hosting site infrastructure has automatic backups in place. The entire infrastructure, from Internet backbone connections, to redundant power feeds and generators, to full redundancy on hardware, is designed to be fault tolerant to deliver "Five Nines" (99.999%) uptime - that's less than five minutes of unplanned down time in a year.

*Can I move data between existing applications and the Hosted application?*

Yes. The applications can be integrated with your existing enterprise business systems through a standard communication protocol. Other applications that reside on your personal computer or that are custom developed may require more specific solutions.

*Are there any additional software and hardware costs?*

Subscription fees are for the base applications and the equipment. If you require dedicated equipment or custom integration, those fees would be priced separately.

*Does the Service Provider provide training?*

Yes. Training is included for your staff as part of the implementation fee. Client training and follow-up training can all be arranged. Those fees would be priced separately.

**Background Information on Hosted Applications**

Application Service Providers (ASPs) deliver and manage applications and computer services from remote data centers to multiple users via the Internet or a private network. Commercial ASPs offer a cost-effective solution to the high cost of system ownership by reducing the up-front capital expenses and the continuing need for maintenance and upgrades.

ASPs give customers a viable alternative to procuring and implementing complex systems themselves or a comprehensive alternative to building and managing internal information technology operations. ASP customers are able to control more precisely the total cost of technology ownership and, with data processing performed off-site by a third party, organizations can focus on their areas of core expertise.

**Benefits from using an ASP include:**

1. Speed to market: the ASP already has the equipment, applications and expertise ready to provide rapid market access
2. Operational freedom: by outsourcing application management, the customer can focus critical resources on their core business function
3. Improved performance: ASPs can apply their vast experience to implement best IT practices for superior levels of availability, security, backup, disaster recovery, and help desk (shadowing)
4. Financial flexibility: this model reduces fixed costs and lowers overall expenditures for hardware, applications and management.
5. Reduced risk: with no capital expenditure on software, hardware, and IT personnel, organizations can "test" a new technology with minimal impact to their existing environment and bottom line.

**What kinds of customers use application services from an ASP?**

Whether your company is large or small, an ASP arrangement saves time and money, and simplifies ongoing system reliability and support. Application Service Providers (ASPs) deliver and manage applications and computer services—generally on a rental basis—from remote data centers to multiple users via the Internet or a private network. Most industry experts agree the most appropriate market for ASPs is small and mid-sized organizations, but all agree there is also opportunity within both large enterprises and consumers.

With the help of an ASP, organizations can deploy enterprise applications that without an ASP would involve massive investments in software, deployment time and IT personnel. These businesses can then benefit from the efficiencies of integrated, enterprise applications that were previously not cost-effective to develop and use.

With business operations now increasingly dependent on complex and rapidly changing information systems, IT managers are embracing the ASP approach to ensuring secure, business-critical applications. Large companies may decide to enlist an ASP to quickly deploy critical, enterprise applications at an affordable cost, since the resource requirements for supporting these systems have grown exponentially.

**How reliable is the service from an ASP?**

The goal for the ASP industry is to make the management of information technology as transparent ... and reliable ...as the management of sophisticated public telecommunications and data communications systems. Customers who turn to ASPs often find better application reliability and availability than they experienced from their internal IT organizations.

The reason for this is that running information systems for other entities is the ASP's primary business. The ASP has the staff, expertise and state-of-the-art equipment to maintain and sustain the most reliable and up-to-date service.

**What kinds of applications can be delivered this way?**

An ASP can deliver just about any kind of software application as a hosted application. The only difference in the application is that it is running on a central server managed by the ASP as opposed to on the end-users desktop or the company's server.

**What about customizing the application?**

Many times minor changes can be made just turning on/off certain features and functionality inherent in the application. Applications requiring a high degree of customization may require specific fee arrangements and service arrangements to be provided in a leasing arrangement.

**How should I select an ASP?**

Issues to inquire about include reliability, availability, security, management, and customer service. Determine what features are most important to you and choose your ASP based on who has the strongest offering of what you need.

**Does an ASP own its own data center?**

It depends. Some ASPs own their own data centers, others outsource the physical management of the systems through a data center.

**Hosted Applications are not New**

While the terms 'Hosted Application' and 'ASP' may be a new, what they describe is already commonplace in many areas of information technology.

There are three main forms of application services a typical business might use today:

- 1) Application outsourcing -This is delivery of top-tier enterprise applications on a pay-as-you-go basis. This has appeared as a brand new category, but really is just the tip of the outsourcing iceberg. Every level of the IT infrastructure can be selectively outsourced today, from data networks, through systems management and on to messaging.
- 2) Application hosting – Application Service Providers host web sites with interactivity and transaction handling that integrates with a customer's existing in-house systems.
- 3) Web sourcing - Probably the world's most successful ASP to date is E\*Trade, the online broker. For a monthly subscription, users rent access to an online trading application with instant graphing and statistical analysis, real-time information feeds and more.

The bottom line is that application services are emerging so fast that most users don't even realize that's what they're called.

***Every now and then, an invention comes along that revolutionizes business processes. Morse code, the steam engine, wireless radios, and the Internet—to name a few—each dramatically altered the course of modern business.***

It might be a stretch to compare the impact of application service providers on modern business to, say, the introduction of electricity, the telephone, or internet technology, but there's no denying that ASPs will forever change the way businesses think about—and purchase—software applications. Businesses of all types and sizes are investigating the economic and management advantages of buying application software *services* rather than application *software*. The savings can be enormous, according to some analysts.

**Necessity: As Usual, the Mother of Invention**

The Internet—with its ubiquitous reach, integral and open standards, and devaluation of expensive desktop PCs—has enabled and in fact necessitated far-reaching changes in the ways companies do business. With such wide-reaching support of the Internet's ability to revolutionize business practices, it's only natural that the Internet would be called upon to deliver business applications themselves. Hence, the birth of hosted applications and the ASP.

An ASP is simply a company that hosts applications for other companies over a network or the Internet, charging these companies a negotiated fee for their use. The ASP then manages the applications itself, taking responsibility for maintenance, upgrades, and even storage of client data. ASPs offer a huge variety of applications that include everything from office productivity tools to solutions tailored for particular vertical industries. In fact, you can find ASPs that offer custom solutions for manufacturing, financial services, insurance, wholesale, retail, government, education, communications, transportation, mining, agriculture, and construction.

### **Into the Future: ASP Advantages**

The benefits of choosing an ASP business model are many, especially for small- and medium-sized companies with limited budgets and staff and pressing time-to-market constraints.

#### **Cheaper High-End Applications**

Because an ASP offers services to such a large audience, it can offer applications more cheaply than if that audience bought the applications themselves. Companies that might not otherwise be able to afford an expensive application can instead rent through an ASP.

#### **Specialized Support and Expertise**

Expert support staffs are costly, especially for smaller companies that may not require full-time database or application experts. ASPs offer support services for the applications they host, outlined in the form of service-level agreements (SLAs).

#### **Invisible Upgrades**

Upgrading desktop and server software is a painful process. By contrast, an ASP can upgrade software on a much faster cycle, often with little or no interruption to service.

#### **Fast Deployment**

The length of time between purchasing and launching a packaged application suite can be as long as two years, depending on the project size and complexity. For many companies, two years is a lifetime—literally. By using an ASP, a company can potentially get key business applications up and running in a matter of weeks.

### **Choosing an ASP**

Listed below are several questions that will help you to evaluate the specific service provider you are considering:

1. What expertise can the ASP show for providing that set of applications to your industry?
2. Who are the business and technical partners of the ASP you are considering?
3. What is the level of performance (response time) and availability guaranteed by the ASP?
4. How are the applications and data stored?
5. Is a Web browser all that's needed to access the service?
6. How well will the company and its systems be able to scale as more users come onboard?
7. What are the security provisions of the hosting and application services?
8. Does the ASP provide a B2B portal, exchange, or community site to enhance the utility of its core offering for its users?
9. How is the service priced—monthly, quarterly, based on the number of users? How much will you pay for necessary added services in consulting and customization?
10. How self-service are the applications? What kind of customer service (Web, phone, fax, on-site) is provided?
11. What is the expected time to deployment?

We hope this information helps answer any questions you have regarding hosted applications and look forward to answering any additional questions you might have regarding our Quasar product, service levels, and capabilities.