

Application Service Providers

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An application service provider (ASP) is a business that provides computer-based services to customers over a network. Software offered using an ASP model is also called software as a service (SaaS).

An ASP owns and operates the software application(s) that are needed to provide the service; it owns, operates, and maintains the servers that support the software; it provides access to the application(s) and information available to customers via a network, usually the Internet; and bills customers on a "per-use" basis or on a monthly/annual fee basis. The services include such tasks as loading records, back-up and recovery procedures, hardware maintenance, loading new software releases, and responding to customer inquiries. The ownership and management of data content remains with the customers.

There are several forms of ASP business:

- A **consumer** ASP delivers an application to individuals, such as e-mail;
- A **functional** ASP delivers a single application to organizations, such as credit card payment processing services;
- A **vertical market** ASP delivers a solution package to a specific organization type, such as an integrated library system for libraries;
- An **enterprise** ASP delivers a broad spectrum of applications to organizations, such as payroll, accounts payable, accounts receivable, and tax preparation.

While many libraries use functional ASPs, the focus of this TechNote is the vertical market ASPs that serve libraries.

Advantages and Disadvantages

The perceived **advantages** of using an ASP are:

- Rapid start-up
- The capital costs of software and hardware are avoided
- Predictable ongoing costs
- Obviating the need for in-house IT staff to maintain and manage the application(s)
- Timely implementation of new releases
- A guaranteed level of service with regard to availability, reliability, scalability, and security

Some inherent **disadvantages** include:

- The customer must generally accept the application as provided since ASPs can only afford a customized solution for the largest customers
- The customer has to rely on the ASP to provide the application, thus limiting its control over the management of the application
- Changes in the ASP market may result in changes in the type or level of service available
- The ASP may be unable to provide the level of service committed because of technical, labor, financial, or other problems
- Integration with the client's non-ASP systems may be problematic

Library ASPs

Most of the libraries that have adopted an ASP approach to meeting some of their automation needs have chosen an integrated library system as their priority. Almost all vendors of integrated library systems offer an ASP option, some of them for as many as ten years.

The percentage of libraries that have chosen to use an ASP for providing an integrated library system is small, but it is growing. One of the reasons for the growth is that librarians are becoming more familiar with the ASP model; another is that vendors are marketing their ASP options more effectively than in the past. However, the most important reasons are that the cost of data communication over the Internet has dropped significantly because of broadband service and its reliability is no longer in question.

The vast majority of ASP customers are small libraries that need to support no more than 16 concurrent users, but a few mid-size public libraries have chosen the option since 2007. Vendors of integrated library systems have struggled for years to sell turnkey systems (i.e., systems that bundle hardware and software) at a profit to small libraries. But they can provide ASP support at a profit not only to small libraries, but also to very small libraries that need to support fewer than five concurrent users.

There is some disagreement as to whether OCLC (www.oclc.com) offers an ASP solution. While it is a non-profit membership organization, it provides a service over a network using its software and hardware for a fee; therefore, it meets all of the elements of the common definition of an ASP. It offered circulation as a hosted service more than 30 years ago, a service that was not successful because of perceived high cost and concern about network reliability and response times. However, its cataloging support, interlibrary loan, and other services have all been highly successful for as many as 40 years.

An early entrant as an ASP for libraries was Auto-Graphics (www.auto-graphics.com). It has offered union catalog and interlibrary loan solutions for consortia for decades. Subsequently, it extended its ASP offering to include an integrated library

system. More than 95 percent of its almost 200 integrated library system customers have chosen the ASP solution rather than an in-house installation.

The first vendor to offer an integrated library system ASP solution to libraries was epixtech in 1999, a company that was known as Dynix twice in its history and was subsequently incorporated into SirsiDynix (www.sirsidynix.com). The first customer was a consortium that wished to avoid a large capital outlay and the burden of managing a large and complex integrated library system. SirsiDynix has expanded the ASP offerings to include federated searching and OpenURL link resolution.

CASPR followed closely behind epixtech in 2000. Its target markets were school and special libraries, but a few small public and academic libraries also became customers in subsequent years. By the end of 2007, some three percent of its more than 1,000 customers were public libraries and nine percent were academic libraries. The company is now known as LibraryWorld Inc. (<http://libraryworld.net>). It offers the lowest cost integrated library system ASP solution of any vendor, \$365 per year. The functions are limited to cataloging, serials tracking, circulation, inventorying, and patron access catalog. There is no limit on the number of concurrent users, but disk storage is limited to 100MB. More storage is available for an additional fee.

Civica (www.civica.com.au) is an Australian vendor that began offering integrated library systems in the North American market in 2007. Worldwide, nearly half of its more than 250 customers are using the vendor's ASP solution.

Ex Libris (www.exlibrisgroup.com) offers not only its integrated library system, but also its metasearching and link resolution products. Its focus has been the academic and special library markets, but it has pursued consortia that include public libraries.

Follett Software (www.fsc.follett.com), the dominant vendor in the school library market, began offering an ASP solution of its Destiny Library Manager in 2007. A small percentage of its customers are public libraries.

LibLime (www.liblime.com), a vendor of open source software, also offers an ASP option or either Koha Classic for small libraries or Koha Zoom for mid-size libraries.

Mandarin Library Automation (www.mlasolutions.com), a vendor of integrated library systems for school and very small public libraries, began offering an ASP solution in 2007.

Polaris (www.polarislibrary.com), a vendor of integrated library systems that focuses on the public library market, has had nearly half of its new customers since 2006 choose an ASP solution, rather than a locally installed system.

The Library Corporation (www.tlcdelivers.com) has also been a major ASP for integrated library systems. While its first-year costs are fairly typical, it offers lower

ongoing costs than any competitor other than Library World, including LibLime, an ASP that uses Koha open source software.

VTLS (www.vtls.com) offers an ASP option for its Virtua integrated library system.

Costs

While it is not possible to provide costs for libraries of all sizes, an example may be useful, one based on actual price quotations obtained only weeks before this TechNote was written.

An ASP that use proprietary software charge approximately \$30,000 for software in year one for a library needing to support 16 concurrent users and 25,000 to 100,000 bibliographic records. It is possible to negotiate a lower first-year cost if a multi-year contract is signed. One-time account set-up may add as much as \$10,000, data preparation and load for up to 100,000 records may add \$2,000, and on-site training for 12 days. \$12,000 to \$18,000. An annual software license, application management, and maintenance would be \$7,000 to \$13,000. The total five-year cost would be \$82,000 to \$112,000. The major variable would be training costs.

The cost is not necessary less when an ASP that uses open source software is used. While there is no software cost, the set-up is \$2,900 to \$25,000 or more depending on collection size for a library needing to support 16 concurrent users. Data migration adds \$.15 per record or \$3,950 for a library with 25,000 records and \$15,800 for a library with 100,000 records. On site training adds \$2,100 a day or as much as \$25,200 for the twelve days of training that is usually provided by ASPs using proprietary software. Annual support will range from \$7,000 to \$14,000. The five-year cost will range from \$60,050 to \$122,000. The number of bibliographic records and the training cost are the major variables.

Clearly, a library should solicit multiple proposals and make sure that the proposals are comparable.

Other Evaluation Criteria,

While cost is a major criterion for libraries seeing an ASP solution, it should not be the only one. Among the questions that should be asked are:

- o *Breadth of functionality*

Is all of the functionality required by the library available from the ASP? A number of ASP integrated library system offerings are either limited to cataloging, circulation and patron access catalog modules, or offer limited acquisitions, serials control, and interlibrary loan functionality. A library

should not make its choice based on the modules it wishes to implement initially, but on all that may be needed in the next five years.

o *Availability hours*

Are the patron access catalog, federated searching, and link resolution available 24x7 and all other modules all of the hours the library is open, or is likely to be open in future years?

o *Integration with other applications*

Is there integration or a seamless interface among the applications used by the library, both those in-house and supplied by the ASP?

o *Viability of the vendor*

Is the vendor should be profitable, and does it have a library customer base large enough that it can continue in the library market even with a decline in “new name” accounts, sales to libraries not previously customers.

o *Performance guarantees and remedies*

Does the vendor provide minimum up-time and response time guarantees and contractual remedies should the level of service it commits not be achieved.

o *Data Security*

Does the vendor regularly back-up data and maintain an off-site copy of the data.

o *Price protection*

Are ongoing costs fixed or capped at a maximum percentage of increase of no more than five percent per year for the length of the contract period.

Final version, May 8, 2008