Packing Up and Moving On(line): Selecting and Migrating to a Fully Web-Based Information System

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When it comes to grants management software, there is no single solution that will work for every organization.

“It's just like a car,” said Martin Schneiderman. “Some have sports cars, some have minivans. The needs are very different.”

Schneiderman is an independent consultant, and through his consulting work, he has noticed trends not only in hardware and software but also in what people want from their software. For example, web-based portals, with easier and differentiated user interfaces, are becoming more popular, as are online applications. Likewise, online grantee reporting is in demand.

More and more systems are becoming Cloud-based, where data is stored on clusters of servers and accessed over the Internet. Multi-tenant Cloud computing features servers that are shared between different organizations. Some organizations are OK with having their data stored remotely on provider servers; others are not. Servers today cost thousands of dollars instead of tens of thousands of dollars, so having an in-house server is more feasible.

Smartphone use is increasing worldwide, and more people are using iPads and other tablets. One major trend is to move away from the 300- to 400-page board book and put that information on a tablet. Also, increasingly, senior management and program staff are telecommuting.

The profusion of browser types and versions for accessing online data has introduced some technical problems. Different browsers may look the same to the user but often support different technologies. It is important when analyzing systems to be aware of compatibility issues. “This is one of the most common areas where people run into problems,” Schneiderman said. Customers purchase a system, find problems, and then discover that the software they are running is not compatible with their system.

When moving from identifying trends in information systems to selecting a vendor, Schneiderman said companies must be able to reinvent themselves. “When I was in high school, there were slide rules. Then
the calculator came out, and the slide rule companies went belly up. That’s the case in this industry. Our providers and partners have to be able to reinvent themselves.”

A participant asked how to identify companies that can reinvent themselves, noting that many are too young to have any sort of history of reinvention. Schneiderman responded that even with young companies there are some questions that can help: Are their systems compatible with other systems? Will they work with the systems currently being used? Are their systems allowed to work with other systems?


There are different types of services to choose from: Windows-based, Windows-based and accessible from inside a browser using remote access programs, hybrid Windows and web browser applications, and applications that are fully browser-based.

As an example of how user interfaces have improved, Schneiderman showed screen captures of MicroEdge GIFTS Alta, which is a Windows-based solution, and “Classic” GIFTS.

Bromelkamp Company has a product with a fully web browser-based user interface. Another company, Fluxx, has a fully web graphical user interface, as do Good Done Great and MicroEdge. GivingData has an interface that complements some of the other products and works on an iPad. Schneiderman cautioned participants about products that use Flash, a popular way to display graphic presentations. Flash is not supported by the iPad, and Apple has indicated that it will not be supported in the future.

Different systems also require different platforms. Some systems can run locally on an in-house server. Others require remotely hosted servers, which are sometimes shared by other organizations. Data may be stored in a shared database. On a shared server, security concerns may dictate limitations to the way data can be accessed.

Some systems are multi-vendor, with one vendor for the platform, another for the application, and still others for utilities like report writing. In that case, resolving problems can be a challenge unless a single vendor is managing it all.
When working with remote systems, it is important that all communication be done using the https (Hypertext Transfer Protocol Secure) specification. This secures the data as it is being transmitted back and forth to the remote system.

Regardless of location and platform, interoperability is important. “We want all the products to talk to each other,” Schneiderman said. Users must find a solution that works with all the applications the current system is already using.

Above all, match the system to the needs of the organization, he said. For example, the grants manager may want a more advanced interface than would the casual or intermittent user. Make sure that the built-in capabilities of the system are those the staff really needs.

Many of today’s systems are either basic systems with limited flexibility or highly customized one-of-a-kind systems. Highly customized solutions require programming for each upgrade, making them very costly to maintain. More flexible systems, like some modern, fully hosted web-based systems, can be personalized by the user and enhanced over time without requiring custom work by the vendor.

In web-based solutions, compatibility with all browsers is important. Different browsers are popular in different parts of the world, so all must be supported.

Fully hosted web-based systems offer advantages in accessibility and ease of maintenance. They can be accessed from anywhere the Internet is available. The grants management system provider maintains and upgrades the system, handles backups, and ensures that links to local applications and online services continue to function. All this behind-the-scenes work reduces the need for in-house IT support.

Schneiderman showed a video of a man trying to change the tire on a moving car and drew a parallel between that and upgrading a grants management system: There is no way to pause operations during an upgrade. It must be done as the system is still being used.

He suggested a list of questions to ask before adopting a fully hosted web-based system:

- Is the greater dependency on Internet access acceptable?
- Is there a single provider to provide support, or multiple providers?
- Does the new provider have a successful business model?
- Does their staff understand grantmaking operations and regulations?
o Who tests all of the products to ensure they keep working after upgrades?

o Consider data conversion from the existing system and also to a successor system: Is the data stored in standard database formats (like MySQL, Microsoft SQL, or Oracle), or is it in a proprietary format? Is it in a single location and format or in multiple locations and formats?

o What current functionality will be lost in moving to the new system?

o Are there personalized web portals for each user type?

o Are there links to internal or external services like GuideStar Charity Check, OFAC, NGOsource, or accounting services?

o How is the provider doing? Are they growing? How often are products coming out? Some come out regularly, some every six months, some every two years.

o Is the user interface the same across key systems, or is it differentiated between the grants manager and others on the system?

o Is the system easy to personalize (not customize)?

o Is it possible to save and name favorite searches, views, and reports?

o Can the system handle names with accents or nonstandard characters?

o Are the vendors using industry-standard supported software and databases?

o Is the system hosted in a secure, reliable, enterprise-class data center?

o Can the provider handle high volume and shared load? Realistically, the majority of online applications are sent during the last few hours of the last day.

o How good are the vendor’s communications, project management, and user support?

Schneiderman closed with a look at how to handle vendor demos, emphasizing the importance of prioritizing the features that are most important: During the demo, examine the number of steps needed to accomplish common or important tasks; make sure the demo is done with standard (non-customized) software; and check to see how integration with third-party services really works.