Accounting Software System Innovations in the Cloud Computing Era

By:
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The Great Recession that began in 2008 had a huge impact on the spending patterns of American businesses and the adoption of leading-edge technology. Innovation is expensive, and expenditures that weren't considered critical to a company's day-to-day operations or barebones survival were put off indefinitely. As a result, for nearly the last decade, technology, including accounting software systems, has stagnated at businesses large and small.

However, that is changing. As the economy slowly but steadily improves, companies are venturing into the marketplace once again. According to a survey conducted by Piper Jaffray and reported in a January 2015 issue of CFO, chief information officers this year are anticipating at least modest growth in spending on technology, according to polling data from 112 CIOs across eight industries. Eighty-five percent of the companies surveyed were North American, and 25 percent of respondents worked for companies with IT budgets in excess of $50 million.

Almost two-thirds of CIOs expect to increase spending by at least 2 percent on information technology in 2015.

The survey hardly points to a historic upsurge in tech spending, but the trend is heading in the right direction. For comparison, the results of the same Piper Jaffray survey conducted in 2013 revealed that 24 percent of participants expected technology budget declines.

Pent-up demand for innovation is beginning to be addressed as the issue becomes more critical with every passing day, as obsolete accounting systems stymie productivity and are prone to errors and user frustration.

But as businesses start to upgrade, they're finding that the digital landscape has changed dramatically since 2008. While accounting software has traditionally been based on company servers and computer hard drives, the technology is migrating to the cloud at a faster rate than ever.

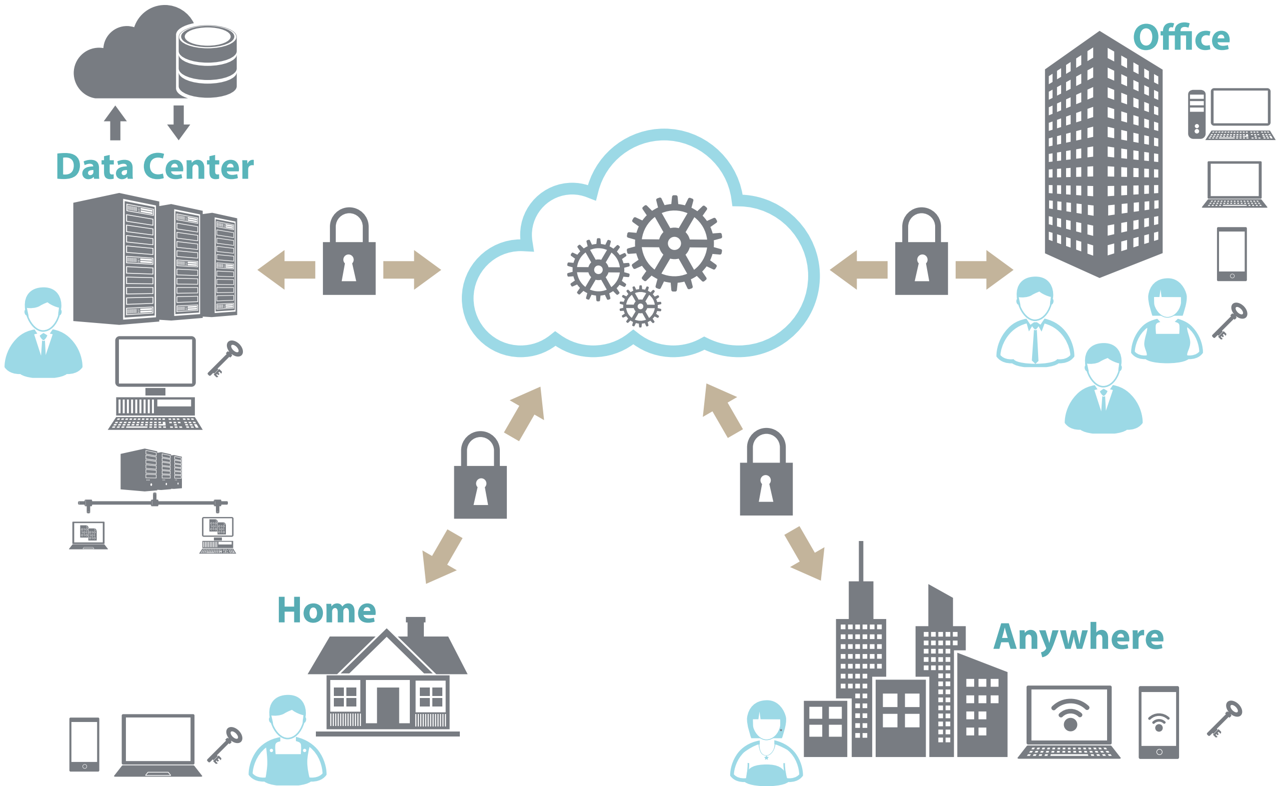
Survey highlights include the following.

- The motivation for spending has renewed confidence in gross domestic product growth, low interest rates and pent-up demand.
- Other top spending priorities include mobile devices, off-premise enterprise software, storage, servers and cloud-based technology.

At its most basic level, the digital cloud is an unseen environment where an individual's or a company's data and programs can be held and accessed, rather than keeping them on local servers and computer hard drives. The cloud involves off-premises data operations and storage at data centers located at sites unseen by users and accessed via the Internet.

Many people are more familiar with the cloud than they might think. After all, they are already operating there on a daily basis, but it's become so common that it can escape attention. For instance, people access the cloud at work or home via data storage sites such as Dropbox or Apple iCloud, or through the suite of products and services known as Google Apps for Work (Gmail, Google Docs, Google Drive and other programs). Here, work can be handled and kept at a web location where only those with valid passwords can access it whenever and wherever they wish.

Another example is Netflix, with which subscribers can stream movies from the cloud to any device without having to store the data on a hard drive.



Each case highlights programs and services that can be accessed from any web-enabled device without assuming the often-considerable data storage challenges. The user is able to focus on performing tasks with the software, while giving little or no thought to the hardware and infrastructure upon which the business services — such as accounting software — or data storage capabilities are delivered.

Cloud computing technology embraces several fundamental service models for hosting data. They are defined below, but it is the Software as a Service (SaaS) model that best reflects the needs of business users of accounting software systems.

SaaS: Software as a Service

This is the model by which the customer subscribes to licensed commercial software applications delivered over the web, and it is the most common and fastest-growing form of cloud computing services and programs for businesses.

PaaS: Platform as a Service

With this model, companies are provided with a platform upon which they can develop, run and operate web applications without having to build and maintain infrastructure of their own. PaaS is generally used by businesses with a focus on software development.

(IaaS): Infrastructure as a Service

Within this model, all servers and infrastructure are held and maintained off premises. For example, this is how Netflix runs its services on infrastructure provided by Amazon Cloud.

DRaaS: Disaster Recovery as a Service

Within this service model, all of a company's data remains in house, but it is backed up and stored off-site to allow a seamless switchover to a cloud environment in case of disruption. With DRaaS, the business does not operate from the cloud but only accesses its programs and data from the offsite location in an emergency.

This discussion of accounting software systems focuses almost exclusively on Software as a Service, as the other service models meet different functionality needs. Continue on to learn about advantages of migrating accounting software to a cloud environment.

Converting from a server-based work environment to the cloud frees companies from concerns related to hardware and infrastructure costs and upkeep, allowing them to instead focus on acquiring and operating the software to effectively and efficiently meet the needs of all users. With the cloud, there's minimal risk of a data breach, theft or privacy issues, and the data of companies operating in the cloud are impervious to the destructive threats of fires, floods, earthquakes and other calamities. In addition:

Save on Real Estate

Companies in the cloud no longer have to dedicate valuable office space to the storage of large servers and other infrastructure that quickly become obsolete.

Updating Software Becomes Painless

Upgrades and updates are automatic and built into the contract, so there is no downtime or interruption of business and no concerns about using old software versions.

Security and Privacy

Security and privacy are the purvey of the cloud software providers, which are backed by advanced technologies and IT professionals with experience in the area. From Target Brands Inc. to Sony Pictures Studios, we're all too familiar with the security breach disaster stories that can enrage customers and create negative headlines and require crisis management professionals. However, businesses that use reputable cloud-based systems can count on getting multiple built-in redundancies and failover systems safeguarded by IT professionals who can protect client data against virtually any threat. That's because cloud providers spend millions of dollars on their security systems and processes — a much larger investment and degree of expertise than the typical client could offer — and they literally stake their reputations on the safety of the environment. They can prove it, too. Data centers offering cloud services should be SSAE16 certified SOC 1 and SOCII. This certification should be done annually and prospective customers can ask to see it. The best cloud providers also put the onus on the customer by insisting on such commonsense safeguards as the use of complex passwords that change every 90 days or so. This might be a minor irritation to those who use the software, but it's another sensible level of protection of a company's sensitive data.

Expanded functionality

Expanded functionality and ease of use are commonplace. As cloud-based technology has become more accepted, accounting software developers are offering an ever-expanding menu of application solutions. Web-based apps are now available to handle general ledger functionality as well as invoicing, online payments, automatic late payment reminders, expense tracking, timesheets, inventory and purchase history and financial reports of all kinds. Many providers also provide intuitive dashboards for real-time review by company leadership and accounting firms as a way of more immediately identifying and acting upon information. In addition to fulfilling these general accounting tasks, there are apps to handle the accounting demands of specific industries. The growth of cloud-hosting facilities has started an avalanche of new app development that targets specific industries rather than the one-size-fits-all model. For instance, software developers MRI and Yardi offer unique solutions for property management and construction clients. There are also apps exclusively developed for microbrewery accounting systems and apps for engineering firms—and new industry-specific apps are in constant development.

Cost Savings

Cloud cost is (or can be) an advantage. Just like no two companies are the same, neither is the accounting software needs of any business like that of any other. That's why a comparison of server-based versus cloud-based costs is nearly impossible. In practice, the transition is often cost neutral if not an actual savings. To illustrate, Wiss & Co. recently completed a three-year cost analysis for a food industry client that had migrated its accounting system to the cloud.

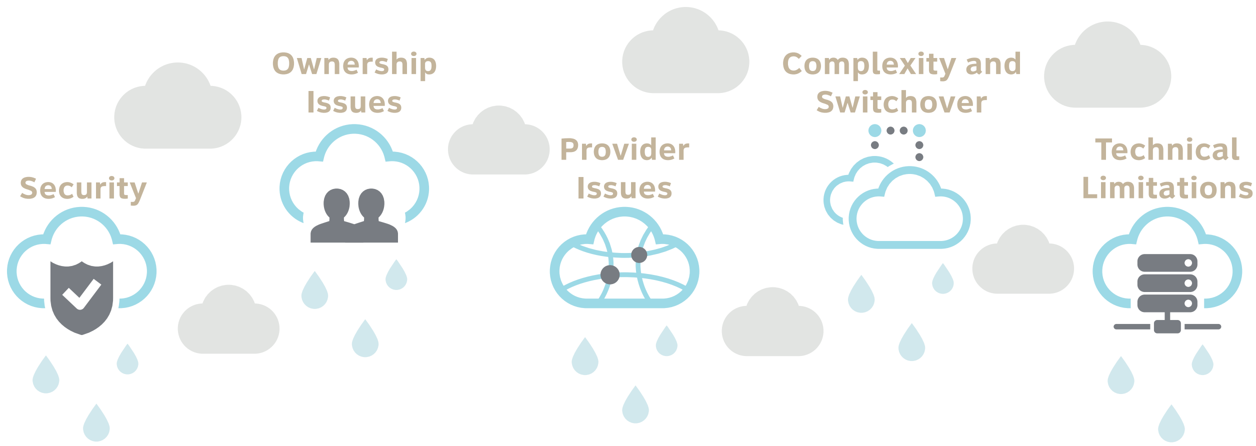
The company's operational costs over the long term were about half that of when they were using its old server-based solution.

Companies migrating to a cloud environment are basically exchanging significant upfront hardware costs for a subscription model that can be reviewed, updated and replaced as soon as needs change. That's not usually true of a server, which is a big-ticket purchase for equipment that typically only lasts about eight years, at which point another hefty investment in hardware must be made. In addition to taking up valuable physical space, servers break down and need the regular attention of in-house or contracted technicians. When servers unexpectedly crash or fall victim to electrical disruption, company productivity must be put on hold until help arrives. All of this represents delays and significant out-of-pocket costs, most of which are unanticipated. When a business leases the service through an SaaS model rather than buying the products, the cost can be anticipated and budgeted and business operations run uninterrupted.

Ability to Work from Anywhere

Employees have greater access to software when they are working offsite or during nontraditional hours. With the converging trends of flexible work schedules and mobile technology, the 24/7 workplace is a reality. Employees need the ability to conveniently handle their responsibilities around the clock and from any location. Cloud computing gives users the ability to access the software anytime, from anywhere and via any web-connected device in order to work faster, easier and more productively. Examples in addressing this challenge are the accounting apps made available for traveling salespeople. These road warriors might only rarely show up at the office, if at all, so apps have been developed that enable them to complete and turn in timesheets and expense reports from a smartphone in a hotel room or via laptop from the lobby of a client halfway across the country. Some expense report apps even allow the user to snap and submit photos of travel receipts for expense accounts and tax purposes. Accounting departments no longer have to put up with lost receipts or reimbursement requests without paper backup.

While the storage, maintenance and security features and the convenience of 24/7 access from any device makes cloud computing sound like an obvious technological breakthrough for any company, the decision to adopt the technology isn't always so obvious. Below are certain issues that should be addressed before a company makes the decision whether or not to migrate its accounting system to the cloud.



Security

For many businesses, nothing is more sensitive than data generated within the accounting department. It's here that social security numbers, personal and business banking information, profit/loss figures and other critical reports and information could be exposed to a breach.

While most cloud vendors have safeguards that are more sophisticated than the average company could even hope to put in place — and have the certification to prove it — data breaches are not unheard of. For instance, the Apple iCloud was hacked in 2014, famously resulting in the release of a trove of embarrassing photos of celebrities. The breach apparently involved social engineering as well as technology vulnerabilities. Hackers were allowed to try multiple password cue guesses based on facts easily found online about the celebrities. Therefore, the breach doesn't necessarily reflect real-life concerns in a business environment, but it must still be pointed out to emphasize that no system is 100 percent guaranteed secure.

Also, keep in mind that cloud-based applications have as many gateways as there are employees with password access. So a valid user with a lazy or too-apparent password, or an employee who shares the password with unauthorized parties, can create unintentional havoc. That's why security training needs to be part of any migration.

Sometimes the exposure isn't even unintentional. Companies that don't immediately change passwords when a disgruntled worker leaves employment can become a target, but most of these potential flaws are easily addressed with commonsensical practices and procedures. An expert consultant in the transition can also help mitigate the potential for data breach.

Ownership Issues

Who owns a company's invoices, timesheets, client lists and profit/loss statements? In the traditional accounting system environment, the answer is obvious. But when the data is stored in the cloud, the issue of data ownership becomes murky.

For instance, while law enforcement could only take your computers, servers and stored data with a court order, the policy of voluntary turnover might vary with cloud providers.

Prospective customers should start by carefully reading their software vendors' Terms of Use statements, but a lawyer consulted by TechRepublic in a 2013 web article stated that the issue of data ownership should never be left to chance.

"The contract should clearly state that all data are owned by the client and contain a provision that, at the termination of the contract, the provider should agree to deliver a copy of client data and permanently destroy all the copies of the data in its possession." That recommendation was made by Marcus Lee, an attorney at Moore & Val Allen with a specialty in IT law.

Reliance on a Single Provider

What would happen if a cloud service vendor running most or all of a company's accounting apps decided to suddenly change monthly rates or terms of usage? How quickly and seamlessly could the customer respond by transitioning to another vendor? Since changeover isn't a quick or easy process, a company might hesitate to change despite sudden dissatisfaction with terms of the current provider.

Complexity and Cost of Switchover

Migrating from a server-based accounting system to the cloud is an investment in time and effort and can involve multiple human resources. This might be seen as an impediment to such a major change, but the argument could also be made that not changing is a disruption the company is already facing.

Technical Limitations

There are cases where certain software simply can't run in the cloud. The restriction could be because of the software itself or because of a situation in which the technology within the software is limited to a local or LAN-only connection. In other limited scenarios, it could be more expensive to host servers in the cloud. This could be a factor of disk space, memory or processor issues. Solutions in some cases could include keeping the systems on-site and having a real-time copy kept in the cloud.

Transitioning your company from server to cloud-based accounting system technology is never a simple task, but it can be done in a seamless and problem-free manner if handled by the right professionals. But don't expect that it won't involve a time and labor commitment. Even with outside assistance, companies can expect to involve five to ten percent of company resources in the changeover, but if the company tries the migration without expert guidance, the effort could tie up as much as 40 percent of the workforce.

The process can also take as long as six months, from vendor selection through successful implementation and training and full adoption by workers. But again, with the proper assistance and guidance, the transition can have little or no impact on company productivity, at least until the system is installed. At that point, training time can cause temporary slowdowns, but the overall effects should be minimal.

While every company's experiences will be different, here's a general idea of the steps involved.

6 Ongoing follow-up – Some quirks won't become apparent until long after the system has gone live, so the company must stay on point for at least a year after the transition to answer questions and reassure users.

5 Validation testing and training – It's imperative that all who will interact with the new system know how to use it and that its performance is thoroughly tested. Companies can expect a degree of user confusion and mistakes initially, so patience is required.

4 Development of a project team – Identify and draft the internal and external resources needed for the team that will work on the transition. Develop scheduling documents so everyone knows what must be done and when each milestone must be met. The team will be working together for at least several months, so make sure members can work well together.

3 Contract creation and review – The migration process is a time and capital intensive undertaking, so it's important that all parties have a thorough understanding of contract terms and completion dates. What will you get and when will you get it? Businesses should make all points clear and make sure the contract goes through legal review.

2 Vendor selection – The next step is to release the RFP and begin to interview prospective vendors. Selection should be made on credibility and chemistry as well as on price because the vendor will be a critical member of your work team.

1 Discovery – Companies should start the selection process with an open review of needs and pain points. Begin by conducting sessions with all internal subject experts and affected employees. It's only with this information that the company can understand the scope and scale of the project and begin to write a request for proposal.

This is a simplification of a process that can actually involve hundreds of individual steps from discovery to follow-up. But a qualified consultant can help unpack and pilot the process and proceed toward an accounting software solution that's secure, productive, convenient and easy to access and use — and tailored to every company's unique requirements.

As companies begin to invest in upgrading accounting software to handle increasingly complex demands and customer growth, consideration needs to be given to all options, including cloud-based services. These services can help companies save money, space and resources, freeing up capital to focus on core competency goals rather than spending on servers and system maintenance. Cloud-based services also provide a safe environment that includes data backup and access to the data from any location that has an Internet connection, creating productivity gains and ease of access.

While no solution is 100 percent safe, the security and reliability of cloud-based systems has been proven over time when they are setup properly with the necessary safety precautions and training.

With so many variables at stake, from vendor selection to implementing the system with a minimum of disruption, companies should proceed cautiously and consider securing the services of an advisor who can provide guidance during the transition.

Cloud-based accounting software can provide major advantages to companies that choose this option, as long as proper procedures are followed and all factors are considered before starting the changeover process.

About the Author

Paul Ursich, CPA, is the Director of CFO Advisory Services at Wiss & Company, LLP. With over 19 years of diversified accounting experience, Paul reviews accounting processes and procedures in order to increase the overall efficiency of finance and accounting departments.

His specific areas of expertise include financial statement preparation, revenue recognition, accounts payable, accounts receivable, payroll, project accounting, labor pricing and costing, and budgeting/forecasting.

Over the span of his career, Paul gathered his extensive knowledge as a Controller for successful engineering firms. His role comprised of being responsible for concise financial reporting and overseeing diverse teams of finance staff.