Running a Business in the Cloud: A CFO’s/CIO’s Journey

By Tom Kelly, Managing Director of T-Edward, Inc.

In the Beginning...

A colleague once said to me, “Tom, it makes too much sense…so we are not going to do it.” Remember this comment as you read on.

My first experience with a service like cloud computing was back in 1998, when the application service provider (ASP) model had come to fruition. I was the CFO at Deluxe Corporation, a $2 billion provider of checks and business forms that ran an IT infrastructure in dire need of improvement. From tools to processes, one could argue we were stuck the ’70s! As any well-managed company at the time would do, we embarked on selecting and implementing one of the very large and expensive client-server ERP offerings.

Deluxe invested many months, tens of millions of dollars and hired many resources to maintain the ERP system, but when we went live, we had less information to make decisions than with our old systems. We gained some cost-effective improvements in transaction processing, but with limited data for proactive decision-making, this large client-server ERP system was ultimately not a viable solution. We ended up shutting down the ERP system and began looking for a tool that would enable us to revamp our budgeting, planning and forecasting processes. We took a look at Adaytum (acquired by Cognos in 2002), which offered an ASP-hosted tool that would allow us to interact with the large ERP system without the need to put the application on our own servers.

Suffice it to say that Deluxe decision-makers did not welcome the idea of having key financial data hosted outside the corporate firewall. However, when faced with options that would cost 10 times the amount quoted by Adaytum and assurances that data would be secure, Deluxe decided to embrace the tool in an ASP environment. We moved the company’s entire planning, budgeting and forecasting process to this new model.

The results of this then-pioneering initiative were remarkable. Our planning process was transformed from a once-a-year, non-collaborative exercise that relied on error-prone spreadsheets uploaded to SAP to a collaborative, stakeholder-driven process that provided real-time visibility into performance metrics and enabled us to make better business decisions.

This experience started my journey to find business applications that were nimble, flexible, accessible, dependable, scalable, easy to use and of course cost-effective—and this journey eventually led me to find cloud computing technologies. I also made the decision to transition to the small to mid-size business (SMB) environment and focus on being a CFO for these organizations. The year was 1999, and the dot com bubble was at its height.

In the years that followed, I helped to spearhead cloud software implementations at several more companies in the positions of CFO and/or CIO, netting an 837% return on investment (ROI) at one company, 2nd Wind Exercise Equipment, as highlighted later in this paper.
To date, I have had the privilege of working with teams at 15 organizations to implement cloud infrastructures that have delivered breakthrough improvements in performance, productivity, growth and cost efficiency, using some of the cloud solutions depicted in Figure 1. I have found that a deep understanding of technology has helped me significantly as a CFO and CIO in terms of reducing costs and improving a company’s performance by putting the right tools in the hands of all employees in a cost-effective and efficient manner.

In 2005, I founded T-Edward Inc., a strategic and operational SaaS consultancy at which I serve as Managing Director; we focus on taking advantage of the cloud to transform organizations. In many cases, we actually help run our clients’ businesses by leveraging their newly adopted cloud applications, including NetSuite, Google Apps, Adaptive Planning and others.

![Figure 1. NetSuite, Google and Adaptive Planning can be core components in a basic cloud infrastructure.](image)

**The Consumer/Social and Business Cloud**

The 2000s were a decade of tech evolution, particularly for the cloud. Sure, as of early 1999, Google was still run out of a garage with a handful of employees, but the then-startup had begun its meteoric rise to the $30 billion giant it is today. The adoption of the consumer/social cloud had begun, and when broadband became the norm in the middle of the decade, the sky was the limit (no pun intended).

With the advent of the consumer/social cloud, momentum was building for the business cloud. As the Internet became ubiquitous, business leaders—especially those in the SMB segment—started exploring how they could leverage the cloud to help run parts of their businesses.
Growth of the business cloud has been swift among SMBs, and now larger companies are adopting the model. The overall market for SaaS business applications soared to $21.2 billion in 2011 and is set to nearly quadruple by 2015, to $78.4 billion, according to Forrester Research. Let’s take a look at some of the reasons behind this phenomenal growth and why the cloud is increasingly attractive to organizations in a variety of industries.

**Leveraging the Cloud**

As with any investment, an organization exploring cloud solutions needs to ensure that its dollars will be well spent and that it will realize a positive ROI. In my experience implementing cloud applications for a variety of companies, ROI has always been strongly positive. If you’d like to model the ROI your organization could expect from a cloud implementation, there’s no need to build your own methodology. You can find a plethora of ROI models, calculators and methodologies on the web, from the simple to the complex, that will fit your needs.

While many companies adopt cloud applications with the assumption that positive ROI is a given, their main drivers for making the jump to the cloud are to gain overall process efficiencies and to run their businesses better, faster and cheaper. A survey by the Sand Hill Group found that increased business agility and cost efficiency are the key drivers for cloud adoption, as shown in Figure 3.

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While the decision to move to the cloud is about investment justification, it’s also about using this technology to improve performance around key areas of the business and to drive the desired behaviors from your team. The tools you use need to enable your business vision and strategy, thus driving process and behaviors. By using the cloud to target opportunities and motivate people, investments are ultimately justified (Figure 4).

**Figure 4. Cloud tools should enable you to target opportunities and shape processes and behavior.**

So what is cloud adoption all about? It’s really about:

- Pain point relief
- Effectively and efficiently running a business
- Data improvement, accessibility and accountability
- Headcount avoidance and realignment
- Focusing on what matters most

My experiences moving businesses to the cloud provide a good picture of the business potential of the technology.

**Fast ROI**

As CFO/CIO of 2nd Wind Exercise Equipment, my company was outgrowing its IT infrastructure. In late 2007, we evaluated a Microsoft Exchange upgrade and found that the upgrade, to support 300 users, would cost at least $225,000. We also had an important need for improved communication, collaboration and project management that exceeded the capabilities of Exchange. We decided to explore cloud options that would enable us to cost-effectively manage our messaging environment while providing geographically distributed users with collaborative tools. 2nd Wind had already been using NetSuite for cloud-based ERP, which gave us increased confidence in making the move.
We ultimately made the move to Google for email, document management and web hosting. As reported in a case study, independent research by Nucleus Research calculated that 2nd Wind achieved 837% ROI from cost avoidance and time savings, with a payback period of 0.08 years and an average annual benefit of $341,177.

Streamlined Processes

As a CFO for several companies, the arduous process of cutting a paper check has always mystified me. With a traditionally well-controlled process, cutting a check amounts to 17 specific steps, starting with entering a purchase order and ending with mailing that check. By using NetSuite, the leading cloud ERP system, my businesses have cut 17 time-consuming and wasteful steps down to five. Now that’s time savings!

With the traditional check-cutting process, the finance department struggles with manual, paper-based processes:

1. Enter purchase order into the accounting system.
2. Print the purchase order and put the purchase order in the open purchase order file and await invoice and receiving documents.
3. Receive invoice from vendor.
4. Enter invoice into accounting system.
5. Place invoice with purchase order in the open purchase order file.
6. Receive purchased item and send receiving documents to the open purchase order file.
7. Compare the invoice, purchase order and receiving documents to ensure that order fulfillment and proper invoicing.
8. Attach invoice and receiving documents to the purchase order and place in the “to be paid” file.
9. Pick up batch from the “to be paid” file and enter receipt into the accounting system.
10. Process accounts payable for those items that have been audited as accurate and are ready to be paid.
11. Print out check with check voucher and submit all the paper to the CFO to review and approve.
12. CFO approves and signs checks.
13. Checks are separated from check voucher.
14. Check vouchers are filed for document retention.
15. Checks are placed into envelopes.
16. Appropriate postage is placed on envelopes.
17. Envelopes are mailed.

NetSuite cloud ERP simplifies and speeds the process:

1. Enter purchase into NetSuite, order product.
2. Receive invoice and items and enter receipt real-time into NetSuite. NetSuite automatically matches quantities and amounts.
3. Review items to be paid via digitized documents online—no paper!
4. Click on the items you want to pay.
5. NetSuite processes payment and prints and mails the check for you.

This is one simple example of how the cloud can improve business processes and efficiency.
Anytime, Anywhere Access to Real-Time Information

As Managing Director of T-Edward, I run the administrative functions for over nine companies with a staff of five people. How is that possible? The cloud makes it possible for T-Edward and our clients. The single biggest advantage of running nine companies in the cloud is that I can be anywhere and have full access to each client’s key processes through nearly any Internet-enabled device. My clients don’t need to build out complicated networks and VPNs, and I don’t need to juggle nine laptops to keep data segregated. At the click of a button, I can seamlessly change hats. The cloud easily lends itself to improving access and accuracy of data and in many cases accountability.

Busting Cloud Computing Myths

With apologies to my friends at Mythbusters, let’s bust the myths that I frequently encounter when working with organizations that are looking to the cloud to improve their business operations. I often hear concerns over uptime, data security, scalability and whether the cloud presents a steep learning curve. These are certainly legitimate questions that a prospective cloud customer should ask, but any idea that the cloud falls short in those areas is simply a myth.

Figure 5. Myths around cloud computing would make for a good “Mythbusters” episode.  

Uptime

The uptime issue is almost always raised by companies when considering a move to the cloud. If a cloud application cannot be accessed on a reliable and consistent basis, then it really shouldn’t be an option for the organization.

Interestingly, the cloud uptime issue is often raised by individuals who have only anecdotal information on the availability and reliability of their company’s on-premise email, accounting and other applications. If I ask about a company’s uptime statistics, I’m often met with confused stares and questions around whether the business even tracks that information. Almost on cue, someone in the room will bring up “that time” that an application was down for a whole day or even several consecutive days.
If I ask about software upgrade experiences, I’ll often hear horror stories about how an application couldn’t be accessed for days during the upgrade, or how much retraining was required because the upgraded application was radically different than what the user community was accustomed to.

Based on my experience, I think that if companies kept internal uptime records (and some do, albeit with questionable methodologies), few would be above 99.0% availability.

Solid cloud companies provide 99.5% or higher availability and provide their customers with 24/7 access to uptime statistics so that customers can always know system uptime status. Figure 6 illustrates the publicly available uptime statistics of NetSuite taken on December 22, 2011 at http://status.netsuite.com.

Figure 6. NetSuite uptime statistics are available 24/7 at http://status.netsuite.com.

It’s rare for a good cloud provider to have unplanned downtime and when it does, it’s usually for a few minutes or, in some very unusual cases, hours at most. In my experience, cloud applications have almost always given my companies more stable and reliable access to our systems than the on-premise systems we were running beforehand.

One final thought about uptime—if there is an outage at a cloud-based provider, it’s usually broadcasted worldwide. It’s comforting to know that I can rely on millions of users to let me know that a particular cloud application has suffered a 30-minute outage. Basically, the world keeps score and the vendor is going to respond quickly because its business success depends on it.

Data Security
From the cloud provider’s perspective, data security is a must. If well-managed cloud providers cannot protect their customers’ data, then there is no cloud and their business will cease to exist.

A key component of a cloud provider’s business model is its data security protocols. Most established cloud providers dedicate a high percentage of their overall headcount to ensuring that their operations are as safe and secure as possible. A good cloud provider will also follow industry best practices around security that would be too costly and complex for most IT departments to implement on their own. These cloud providers will possess SAS 70 Type II Audit certification, EU-US Safe Harbor certification and compliance with Payment Card Industry Data Security Standards (PCI DSS).

The cloud improves IT security for our customers at T-Edward. Instead of needing to hire IT staff to secure sensitive servers and data flows inside the perimeter of the organization, companies benefit from the best minds in the industry, engaged by cloud service providers to keep their high-volume data centers safe. Similarly, data flows and shared sign-on between cloud applications are negotiated and secured by the cloud providers themselves, not by some bolt-on product or custom script that may require intensive local IT support just to keep it running, and which cannot be easily audited.

**Learning Curve**

The learning curve can be quite steep when a company adopts a new technology or tool, and operations can be impacted for a time after the go-live switch is flipped. But in my experience, flipping the switch on cloud applications does not have to be difficult or problematic if you follow a solid project plan that includes a training component.

In fact, given that most cloud applications use a familiar user interface, the learning curve is usually fairly quick—particularly when compared with that of on-premise systems. (See Figure 7).

![Learning Curve Diagram](image-url)

*Figure 7. The cloud learning curve is typically smoother than with on-premise applications.*

**Scalability**

A critical consideration in evaluating a cloud application is its ability to scale as your business grows. A cloud solution should make it easy for you to add new users, new offices, new products, new customers and new suppliers. Make sure you do your homework when you evaluate a cloud provider’s ability to scale and accommodate your business growth.

When considering whether the cloud can handle your business’s transactional demand, consider that Google Apps has over 30 million users. What company hosts its own email with 30 million users? Answer—none!

One good way to compare a cloud-based SaaS provider to an on-premise software provider is to...
consider a single-family house versus an apartment building (Figure 8).

The single-family dwelling stands alone and needs its own electric, water, fuel and other utilities and infrastructure to serve the few individuals who live there. Contrast that with a multi-tenant apartment building. The apartment dwellers share a common, cost-effective infrastructure; they all benefit from the services offered. Building management can focus on improving the overall infrastructure versus implementing those improvements one inhabitant at a time. Simply put, multi-tenant is a more scalable environment.

**Stability**

Ensure that you do your homework on any company you’re considering as a cloud solution provider for your business. Since you will be entrusting a part, or in some cases your entire business, to the cloud, it is imperative that you conduct thorough due diligence with regards to the cloud provider’s:

- Financial strength
- Market leadership
- Number of customers
- Number of users currently on the system
- Up-time history

**The Real Cost**

As previously mentioned, don’t try to reinvent the wheel when it comes to determining your ROI or total cost of ownership (TCO)—there are a number of ROI calculators and methodologies to choose from on the web. But do take the time to be as thorough as possible when considering the costs that will be mitigated and the process efficiencies that will be gained by embracing the cloud.

In my own experience implementing both cloud and on-premise business systems, the hard dollar benefits of the cloud are clear—no need to purchase a server, headcount avoidance and reduction, no
costly IT maintenance and upgrades, etc. But you also need to consider the efficiency gains you will achieve, such as anytime, anywhere access to data, streamlined business processes and enabling cost-effective telecommuting.

**What Happens to an Organization that Leverages the Cloud?**

So how does cloud adoption affect the organization? Companies frequently ask what would happen to IT, to the finance department and other functions such as sales and HR if they move to the cloud.

**What Happens to IT?**

By embracing the cloud, the IT department can turn itself into a strategic partner in aiding a company’s growth and performance. IT can become a champion of maximizing the user experience and improving productivity and company growth—versus simply maintaining and implementing applications.

With the cloud, the IT department can seek out cost reductions and efficiency improvements in many areas, including but not limited to:

- Efficiency improvements—focusing on maximizing user experience and efficiency and truly allowing technology to be an enabler and not an inhibitor to business and individual performance
- No more upgrades (software or servers) and the activities/resources associated with them
- Hardware—servers, phones, computers, storage
- Removing WAN and activities associated with them
- Incremental headcount avoidance or resource reallocation/realignment
- Reduced energy costs and enhanced green initiatives
- Disaster recovery…think pressing the “Easy Button”

**What Happens to Finance?**

Remember the movie “Apollo 13?” Finance can quickly move from a group that provides historical information to a group that is equipped with capabilities similar to NASA’s Mission Control. Embracing the cloud provides the finance department with the ability to deliver timely, accurate and actionable information 24 hours a day, 7 days a week, 365 days a year. It enjoys new depth and scope in data access and analysis, from how many units have been sold in the last hour to the profitability on each sale.

By embracing the cloud, finance can drive cost savings and efficiencies that include:

- Paper reduction—make data digital and upload for easy access and retention
- Streamline the financial close process
- Be SAS 70 Type II-compliant instantly
• Incremental headcount avoidance or resource reallocation/realignment
• Outsource payroll—all checks directly deposited with electronic copies emailed to employees
• Companies cut their own checks…why? Make the process 100% electronic
• Insurance—less hardware, less headcount, improve data security
• Reduce Sarbanes-Oxley requirements—share them with the cloud provider
• Become a true business partner with other departments and processes including order management, sales commissions, budgeting, forecasting, planning, etc.

What Happens to Other Functions?
Additional functions that can achieve immediate positive results include human resources and sales. HR can effectively move from a paper-based function to a digital provider of accurate HR information at the right place and time. A salesperson can be the CEO of his or her individual book of business by automating administrative processes including quotes, product configuration, telesales scripting and sales methodologies. I have found that the cloud is particularly effective at streamlining and automating cross-departmental business processes such as order management and commission management. Also consider the opportunity that the cloud provides relative to a real mobile workforce—enabling personnel to work any place in the world at any time.

In Conclusion
The business cloud has arrived, take advantage of it.

Do the ROI/TCO exercise, but think beyond immediate IT cost savings to incorporate efficiency and productivity into your equation. Make sure that you consider that the solution you choose needs to enable your vision and strategy, thus driving desired employee behavior. That is the only way to achieve your goals. Size up the myths related to the cloud and compare them to the facts available—you’ll soon find they are exactly that, “myths.”

There are plenty of real-world examples of how companies large and small have transformed themselves by leveraging the cloud. The cloud is transforming business operations for those organizations that are prepared to look beyond their fears of the unknown and explore what is possible.

A colleague once said to me, “Tom, moving to the cloud makes too much sense…if we don’t do it, we will fail as a company.”