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Crunch time 8 **The CFO guide to cloud**

"If your CEO is talking about agility and innovation, you need to be talking about cloud."

—David Linthicum

Everything you've ever wanted to know about cloud has probably been written somewhere, but no CFO has time to wade through it all. That's why we created this executive briefing, with the CFO perspective in mind. Our goal? To help CFOs and their organizations make more effective cloud decisions.

This briefing is organized around questions frequently asked by our CFO clients. Some apply to cloud investments anywhere in the enterprise, others deal specifically with Finance as a potential cloud user. All are relevant for any CFO in business today.



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Now or later

Our CIO wants to move to the cloud over the next three years. Should we do it now or wait until things settle down?

We see few companies today that don't have some kind of cloud initiative underway, so there's a good chance your business has already begun moving. Cloud represents a fundamental shift in how technology solutions are developed and delivered. It's increasingly becoming the new standard.

Many companies today are working on cloud pilots, some are pressing ahead with full migration, and countless others are somewhere in between. Which means the question of whether you should begin to move may be moot. Instead you should be asking: What benefits should you expect from your investments? How can you manage your cloud footprint more effectively? And how will your organization be able to pivot to the cloud most efficiently?

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By the numbers

Multiple surveys with Finance leaders and broader business audiences all point to significant momentum building around cloud experimentation and adoption.

93%

The vast majority of business executives who participated in Deloitte's 2018 global outsourcing survey—93 percent—said their organizations are adopting or considering the cloud.

41%

In a poll of nearly 3,000
Finance and business leaders conducted during a Deloitte webcast, 41 percent said they have cloud technologies in place or are in the process of implementing. Another 16 percent said they are currently assessing cloud options.

48%

Nearly half of Finance executives polled in the webcast said cloud technology would be critical to the performance of their finance organization two years from now.

Leaders get excited about cloud for lots of good reasons. They see the real promise of lower costs, but more importantly, it's strategic value that often tilts the balance.

- **Reduced time-to-market.** Cloud platforms enable companies to scale and launch new products and services quickly—and assess their impact in real time.
- **Scalability.** By being able to provide extra resources when required, businesses can effectively manage spikes and lulls in demand.
- A way to drive agility and innovation. Major vendors are bundling significant new capabilities with their cloud offerings, providing more ways to stay nimble and innovate. Today, companies can take advantage of these capabilities for data solutions, advanced analytics, machine learning, and more, to create a culture of continuous improvement.

Cloud benefits are real, but that doesn't mean cloud is easy. The bigger your ambitions, the more challenging implementation will be. But like so many other things, the value you get depends on the rigor you bring to getting it done. Companies that make the move now can get a jump on competitors in terms of innovation, agility, and cost.

We're just getting started. Where should we pilot?

If you're in the early stages of cloud thinking, there could be a lot riding on where you implement a pilot.

Ask yourself:

- What products or services must continuously change to meet customer demand?
- What information is critical to decision-making, but often isn't available in a timely manner?
- Which products have a high operating cost, but also have usage patterns that vary by day, week, or month?

These kinds of questions can point you to business areas where performance may be suffering from outdated technology and processes. When you think about investing in a cloud pilot, choose an area where agility and efficiency really matter. It might even be in Finance.

The three flavors of cloud services



Softwareas-a-service

SaaS is the most commonly used cloud service. With SaaS, companies pay for finished applications on a subscription basis. Almost any software you can think of is available as a service or will likely be soon.



Infrastructureas-a-service

laaS allows customers to obtain resources without actually purchasing hardware. This approach has the potential to eliminate capital expenses. The marketplace for laaS has matured rapidly, with dozens of providers eager to handle almost any need you have.



Platformas-a-service

PaaS can be used by organizations that want to develop new software applications without needing to acquire and install the hardware and operating system. It also provides access to different, new, and innovative services, such as facial recognition, the Internet of Things, and artificial intelligence.



Case study

Innovation in the cloud

A large global company decided to move its main transaction processing application to the public cloud, driving a 40 percent reduction in annual operating cost. Some of the savings were achieved because of cloud's ondemand infrastructure, but cloud also enabled the company to use automation to reduce manual activities and associated teams. The company is now able to architect applications using reusable components, which are faster and cheaper to replace. In addition, the company is now looking to "white label" the application to third parties that buy their transaction processing services.



Is cloud mostly about cost savings or are there other advantages? How can we realize sustainable savings?

CFOs are often skeptics when it comes to spending based on the promise of savings. So when your company is building the business case for any type of cloud implementation, make sure you're looking at the bigger picture. Finance needs a seat at the table. No one else is likely to bring up the tough questions that need to be asked.

- How much is this going to cost and where is the money coming from?
- What are the known cost savings? When will you see them?
- Exactly what new strategic capabilities will this cloud investment deliver?
- What marketplace advantages will new capabilities create?
- What are the top use cases you'll realize in the first six months?
- How can you capture the value associated with time-to-market and faster innovation?

 How will cloud affect your current and future operating model?

CFOs should be wary of business cases that depend on technology cost reduction alone. Cloud is often less costly to operate than on-premises technology, but there are pitfalls along the way. The business case might be easy to build, but without accompanying changes in people and processes, it can be challenging to realize. Be sure to look at savings that may be associated with the value of agility and time-to-market.

Bottom line? Some companies are achieving returns of more than 10X on their cloud investments when they account for all the costs and benefits. These companies push hard to build a compelling business case—and even harder to deliver exceptional value. That's a high bar, but we've seen it cleared by many businesses and in many functions.



Cloud and the Street

We recently looked at public companies that have invested in the cloud, studying their interactions with financial markets. We wanted to learn how communications with analysts affected company valuations, and we specifically wanted to know how analysts saw the impact of cloud investments on operating expenditures.

Here's what we learned:



Capex versus Opex did not appear as a significant consideration in filings, commentary, and analyst discussions.



Companies may be underselling their cloud investments by only focusing on cost reduction.



Analysts generally responded with little interest when cloud investments were positioned as cost savings. Their interest increased significantly when investments were positioned in the context of revenue channels or revenue enhancement.



Accounting treatments

I'm having a hard time getting my head around the accounting and tax implications of moving to the cloud. What are others doing?

Reporting and tax regulations for the financial treatment of cloud investments are complicated and have changed significantly in the past year. They will likely continue to evolve. You can find the latest technical information on our website, but here's a high-level overview.

For most companies, hardware costs are considered capital expenses. When a company moves to the cloud, those costs can become operating expenses. Cloud software is typically—but not always—bought and paid for on a monthly or annual basis.

Infrastructure services, on the other hand, can be billed in real time based on usage (i.e., per gigabyte of storage used or per minute a server is turned on).

Your current tax structures can be affected by moves to the cloud. Allowable tax treatments, for example, vary for different types of costs associated with cloud services. They also vary across tax jurisdictions and may depend on the designated location of the company, the cloud service provider, and cloud assets and transactions. The devil is in the details, so make sure your tax department is involved in discussions from the outset. Also, be sure to align any accounting treatment decisions with your auditors.

It's important that Finance has a seat at the table—and bring enterprise-wide awareness to the party.

Contracting

What cloud-specific issues should we be thinking about?

In contract negotiations for cloud services, there are many new methods and considerations to watch out for. Volume discounts, service levels, security, and customization are just the beginning. Other issues such as lock-in, liability, indemnification, and intellectual property can also be considerations. Finance—as a partner to the business and a steward of the company—has a unique and indispensable role in working through all these issues. Even when Finance won't be the user.

To enable effective contracting, it's important to create an integrated team of Finance, legal, procurement, IT, and targeted business functions to work together. Outside advisors can help too, particularly if you don't have inhouse talent with experience in cloud contracting. This is a talent and capability gap that companies will be able to overcome only through time and experience.

It's especially important that Finance brings enterprise-wide awareness to the party. Don't do deals for one part of the business without thinking through the costs, benefits, and impacts on others.

Keep in mind that cloud vendors typically build their services and pricing models around standardization. This extends to the way they do contracts. Requests for significant changes to standard agreements will likely be met with resistance. However, cloud providers are in a race for market share. That means you may be able to negotiate for additional benefits and service capabilities. With standardized approaches at the core, how companies use these additional tools can be a key source of competitive differentiation.

Finally, remember that cloud services are continuing to evolve, with contracts changing regularly to include new considerations, terms, and conditions. Cloud providers' standard terms will likely be different every few months. Your skills and awareness need to evolve accordingly.

Security and risk

I've heard the risks associated with cloud aren't better or worse—they're simply different. How so?

Every technology comes with unique risks, and cloud is no exception. We've identified several broad areas of risk to keep in mind as you contemplate cloud migration.

Data security and privacy

The security concerns you heard about five years ago are largely non-issues with cloud today. In fact, the risk management practices of major cloud providers are often more sophisticated than those of their customers—companies like yours. Just be sure appropriate controls are established and enforced. Get your security, legal, and compliance people involved early, but don't let these considerations become roadblocks.

Lock-in

Since the premise of cloud is "pay-as-you-go," companies often assume it's easy to change providers. That's not necessarily true. Migrating a large IT portfolio from one cloud platform to another provider can be challenging and costly. In terms of contracting, being locked-in can mean significant financial penalties for terminating services early—or an inability to adjust pricing if commercial costs change.

Compliance and regulatory risks

Cloud-related compliance requirements can involve a broad range of regulations. Think Sarbanes-Oxley and the European Union Data Protection Act, for example. In many cases, companies may be giving some level of control to a vendor, which can be a challenging situation for auditors. There are also industry-specific regulators and considerations to keep in mind. CFOs should approach cloud in a way that preserves their good compliance and regulatory standing.

Cost savings and other benefits don't materialize

One tenet of the cloud value proposition is cost reduction. Large providers, particularly those offering laaS, say they can deliver computing at a price point that on-premises solutions simply can't match. As with most large programs, however, these savings don't just happen. Nor do the other benefits. Diligence and sustained effort are required.

While there are potential pitfalls around cloud adoption, there are also many examples of companies reaping significant benefits. They're using cloud to transform their service and product offerings, improve efficiency, and increase customer engagement. It can be done. Just make sure your eyes are wide open.



The hybrid risk

In some cases, companies seek the best of both worlds. They want to take advantage of the agility, scalability, and performance offered by cloud, while keeping the flexibility or perceived security of an on-premises system. These hybrid models can lead to complex IT environments where new tools may be required to architect, secure, and manage hybrid cloud solutions. That can also be true for multicloud solutions. Without careful planning, companies can end up with the worst of both worlds: cloud solutions that degrade the cloud business case.

Talent models

What skills are needed to run a cloud-first organization? How are they different from what we have now?

You may have read about how cloud adoption can upend IT talent models. That's often true. When companies migrate to the cloud, IT people often do find themselves spending less time on routine maintenance and "keeping the lights on." This is true for users of the platforms and infrastructure as well, including those in Finance.

In addition, the speed at which work happens in cloud-centric organizations can pick up dramatically. Feedback loops shorten from months to minutes. Want to experiment with a new product configuration for one of your product lines? A team can learn in minutes whether a change is working effectively—and adjust accordingly.

Things are speeding up in Finance, too. Instead of an analyst taking days to get answers to a CEO's questions, results can literally be delivered in real time. See our guide to *Reporting in a digital world* for a closer look at this opportunity.

Not everyone welcomes this kind of acceleration. The pressure is high, and missteps are there for all to see. Cloud is a vehicle for democratizing data. Get used to life in the fishbowl.

The raw supply of talent is another area where companies may face challenges. Major cloud service providers are attracting many of the best developers and analysts, leaving other companies hard-pressed to get the people they need. Make sure you're looking at your operating and talent model in conjunction with any cloud migration.

Talent in the cloud

A global services company was looking to deliver innovative experiences to upskill its workforce, access alternative talent pools, and shape a culture of continuous learning—fully supported by digital technology.

The work involved aligning leadership, designing the talent strategy, and launching a tech college built around a digital learning experience. The company developed a future-state operating model, a governance approach, a measurement strategy, and a curriculum framework. In addition, a boot camp was designed to onboard college graduates from non-engineering programs into technology roles.

This company now has a technology learning program linked directly to its business needs and organizational mission. The tech college helps develop technical and non-technical employees, and keeps the organization on the cutting edge of technology concepts. As a result, the company is able to better manage its recruiting needs and career development practices, while promoting a tech savvy engineering culture.

Finance opportunities

We're looking at a new core finance platform. Are cloud versions of ERP software ready for prime time for a company like ours? What else should we be thinking about?

Major ERP providers are favoring the cloud-optimized versions of their software, while some offer only cloud-native options. Though they'll likely continue to support on-premises technology for the next 10 years or so, much of their investment in innovation is now tied directly to cloud services. As a result, cloud solutions should be the default starting position for most companies looking at core finance platforms today. There may be specific components that need to remain on-premises for now, but that need won't likely last long.

For SaaS, implementation timelines and complexity have been greatly reduced. While integrations across components or platforms still need to be built, two of the most time-consuming requirements have been cut dramatically. First, the time spent developing custom objects and functionality has been reduced with the availability of standard business processes and enhanced configuration capabilities. And second, the time required to develop reporting templates has shrunk. These templates are largely available out of the box, ready to go when you are.

Insights in the cloud

A global business knew it had too many pain points around managing data. Finance couldn't retrieve what it needed from its legacy mainframes, which created roadblocks when information was needed to make crucial decisions. Data was challenging to access and nearly impossible to analyze. The client realized it needed a new cloudbased platform to improve reporting and shift a culture that based its decisions on assumptions.

The demand for change came from Finance, but also from other parts of the business that faced challenges with legacy systems. Because the change had support from all levels of the business, communicating desired outcomes throughout the enterprise was easy. The implementation team included talent from Finance, strategy, analytics, and technology.

This company is now looking to extend valuable new capabilities, including analytics, throughout the enterprise. With a cloud foundation in place, the company is becoming a data-driven powerhouse and embracing advanced technologies to monetize new opportunities.

Major ERP vendors have different cloud strategies and it's important to understand how their platforms and architecture will fit with yours.

The momentum building around cloudbased ERP promises something that Finance organizations have long desired: the ability to uncover and share business insights faster and more easily. Cloud and on-premises versions of major ERP software solutions are inching closer to functional equivalency. That said, change management is an even bigger deal than it was in the past. You'll have to adapt to standardized processes because there's little room for customizing your own processes. And with frequent updates and releases, your team will need to adopt a culture of continuous improvement. That's a good thing.

Major ERP vendors have different cloud strategies and it's important to understand how their platforms and architecture will fit with yours. Many organizations already have data foundation or data lake initiatives underway. Be sure to determine how the ERP platform will integrate with those efforts.

There are also different models being sold by the ERP vendors—single tenant, multitenant, private cloud, public cloud, and other custom approaches. Understand exactly what kind of platform and services you're buying and the implications of the choices. The more you deviate from ERP vendors' core architecture and platform strategy, the more challenges you're likely to have in adoption. Greater deviation could even endanger some of the potential benefits of moving to the cloud.





It's crunch time

As a CFO, you know in your gut that cloud investments will be part of the future, whether they're driven by the need for innovation, the need for cost reduction, or both.

For some organizations, Finance itself is a promising cloud opportunity. For example, with cloud capabilities in hand, Finance could produce and deliver real-time management reporting to help business leaders make better decisions more quickly. Cloud can also enable Finance to standardize and simplify processes. Given the challenges we've seen at some companies, these capabilities might be considered almost priceless.

Elsewhere in the business, opportunities for innovation are bringing cloud into more and more conversations. Sales and marketing. Supply chain. R&D. Customer care. You name it. CFOs need to be aware of all those opportunities.

Like so many important projects, the key to effectiveness with cloud is to have a workable plan and keep moving. Ramping up pilots can be a smart way to go. It gives you a taste of what's possible, while allowing time to bring other parts of the business along. And with Finance at the table, you can be sure that new initiatives can be extended across the enterprise when the time is right.

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