How to Embrace Cloud as a Business Model

INDUSTRY PERSPECTIVE

ViON

Building your enterprise solutions

Executive Summary

As cloud adoption matures across government, many agencies are realizing that this new IT model is much more than a technology decision. It's a business decision that has had significant impacts on the way agencies buy, manage and deliver IT capabilities internally and to citizens.

The challenge, however, is mapping the best path forward to move from legacy operations to a future state that supports faster, more reliable applications that power financial, workforce, security and other operations governmentwide. There is not a one-size-fits-all approach for moving every IT application to the cloud. That's why agencies must consider what can move to the cloud and what's the right mix of cloud solutions to suit their needs.

To help agencies devise a clear path to embracing cloud as a business model, GovLoop sat down with Ray McCay, Vice President of Solution Strategy at ViON, to better understand what questions to ask when choosing a cloud deployment model and how ViON is helping agencies achieve the benefits of cloud faster.

But first, let's start with a brief overview of the importance of approaching cloud as a business model.

Cloud Computing as a Strategic Business Model

Adopting cloud solutions is less about the nuts and bolts that power convenient, on-demand network access to shared resources and more about how cloud enhances business operations within government agencies.

For the most part, the underlying technology remains the same, whether you are deploying it in a legacy environment or in the cloud. Agencies still need servers, storage, networking and software to support their applications. Under the traditional IT business model of buying hardware and software rather than services, agencies had to consider the necessary requirements to properly run their applications.

That hasn't changed with cloud. In a cloud model, the applications still have unique requirements. Some applications are essential for agency operations and must have superior and expedient performance, while others are less critical for daily operations.

"What cloud does is provide a different way of consuming the technology, getting access to it and managing it," McCay said. "There's no magic in the actual technology. The magic is how you put the technology together in a business model to solve your agency's problems."

A cloud model enables agencies to pay only for the IT resources they use. And the resources agencies need to support mission-critical capabilities can be provisioned more rapidly in the cloud to meet changing demands.

Although IT modernization is a naturally desired outcome for organizations when they move to the cloud — whether private, public or hybrid — in-depth, strategic planning is essential. That's because cloud is a strategic business model discussion focused on buying the right mix of services, McCay said.

Specifically, there are five questions government organizations should ask when determining which cloud model to use. We'll discuss them in further detail in the next section.

Choosing the Right Cloud Deployment

Before moving to the cloud, agencies must establish why they are adopting it. Are they hoping to cut costs, reduce their IT infrastructure investments, free up staff to work on priority projects or all of the above?

Once agencies establish their goal, they should also consider these key questions to determine which model is best to use: **public, private** or **hybrid.**
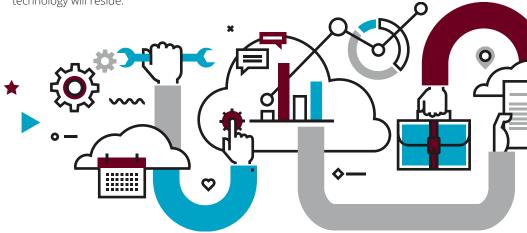
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WHERE DO YOU WANT THE TECHNOLOGY TO LIVE?

One of the first questions to consider is whether you want technology to physically reside in your agency's data center, or if you're open to other options, such as using a vendor's facility. Maybe there's limited space in your data center and you no longer want to own hardware and software, or maybe you want access to advanced technology capabilities at a more modern data center.

If that's the case, a hosted facility managed by a cloud vendor could be a viable option. Note that concerns about data security and data custody will also shape your decision about where the technology will reside.

2

WHO DO YOU WANT TO OPERATE THE TECHNOLOGY?

There are several considerations to make when deciding who will operate the technology. If you want your internal staff to do it, first determine whether you have enough employees with the right skills.

If you'd rather have your employees focus on other tasks, you may decide to use a third-party vendor to manage your cloud environment remotely or onsite. Another alternative is using your staff but supplementing your workforce with contracted assistance. Also consider whether your agency is required to use U.S. citizens to perform these duties.

3

HOW DO YOU WANT TO PAY FOR CLOUD SERVICES?

People often say they want to buy a cloud, but what does that actually mean? Most often, they mean they don't want to pay for the technology with capital expenditure or Capex dollars budgeted for buying and upgrading IT equipment. They would rather pay for access to IT resources as they consume them, which is a fundamental tenet of the cloud business model. This is often referred to as an operational expenditure or Opex model. But depending on which vendor solution you use, there are some nuances to keep in mind.

When most public cloud providers say they allow agencies to pay for usage, what they really mean is agencies will pay for what has been provisioned or allocated to them, McCay said. They don't know how much of those resources are actually being used, but agencies are being charged for what they have been assigned whether they actually use it or not. The other option, which ViON provides, is actually paying for the resources that are used — not just provisioned. "We will provide you that option because we believe it gives you the most flexibility to control your expenses and match your payments to actual business cycles, whether usage is going to go up and down.

4

WHO IS USING THE TECHNOLOGY?

Is technology shared among many agencies and therefore best suited for a public, multi-tenant cloud? Or is your agency the only one using the technology, thus allowing you the benefit of leveraging a private cloud? This is important from a regulatory standpoint, because private cloud deployments intended for a single agency and implemented fully within federal facilities are not subject to Federal Risk and Authorization Management Program (FedRAMP) regulations, McCay said. Shared cloud environments introduce new risks and must meet the extensive requirements set by FedRAMP.

For a growing number of agencies, hybrid clouds provide the best of what public and private clouds have to offer. This option allows them to keep more sensitive information in a private cloud, while making less sensitive data available via public cloud. Market research strongly predicts that hybrid cloud / multi-cloud environments will be the most prevalent cloud model in deployment.

5

HOW DO YOU WANT YOUR USERS TO ACCESS THE TECHNOLOGY?

One of the reasons users are dissatisfied with IT is the amount of time it takes to physically turn on the technology for use. They want to speed up and simplify that process.

In the case of a public cloud environment, setup is almost instantaneous. You can use your credit card and buy a virtual machine, and it's up and running in minutes. People value the ease of an automated service that they can self-provision. But the problem for organizations is that easy access to resources can lead to shadow IT, where organizations don't know what applications they own, where they reside, who's using them and how they are paying for the resources, McCay said. One alternative is to use a user provisioning desk, similar to a help desk, that helps users gaining access to resources and provides monitoring control to ensure purchase are in line with agency standards. ViON can support either option. "Our focus is ensuring your cloud deployment meets mission success," he said.

ViON Accelerates & Transforms Your Path Toward Cloud

REALIZING THE BENEFITS OF CLOUD FASTER

One of the challenges agencies have is ensuring their applications are ready to operate in a cloud environment. Some applications have more stringent security requirements than others, as well as performance requirements, and those intricacies should be determined upfront.

"Many legacy applications that run in today's data centers can't readily move to a cloud," McCay said. "They have too many dependencies, too many connections to other applications and too much data sprawl."

To ensure applications are cloud-ready, agencies must first undergo a series of steps, including application profiling to determine the connections between applications, the location of the data that powers those apps and what type of service levels are required to run those applications at optimal capacity.

The process can be complicated, and could be one of the reasons why more agencies aren't further along in their journey to cloud. It can take two to three years just to prepare applications for the cloud. It's far easier to build new applications that are cloud-ready than to transform existing applications — but the latter is not impossible, McCay said.

"With ViON's Cloud Services, we provide infrastructure in a transformation service," he said. For example, if an agency is using an older server technology as part of its traditional infrastructure, ViON can provide new technology that's faster, more reliable, costs less money, and do so in a cloud model. ViON owns the technology and delivers it as a private cloud to agencies. This approach to cloud means agencies can fully modernize their infrastructure without first going through application transformation. It enables agencies to greatly accelerate the value derived from a cloud business model.

The overall goal is to reduce the time it takes to realize the value of cloud, whether that's improving the performance of an application or moving from Capex to Opex spending. With ViON's offerings, agencies can begin reaping those benefits in a matter of months versus years because they aren't bogged down with prep work.

HOW CLOUD TRANSFORMATION SERVICES CAN BENEFIT YOU

The time will come when you need to tackle an application transformation, but you don't have to go at it alone.

ViON's Cloud Transformation Service provides agencies with a roadmap and assistance to get them from their current state of legacy IT to a future with cloud-ready applications and infrastructure.

"With Cloud Transformation Service, we assist our government customers through the transformation phase using a planned, methodical and proven methodology that reduces and mitigates risk and uses the quickest route to application transformation," McCay said. "This is something we do in tandem with the customer because it's important that everyone involved understands the current and future state of applications."

Here are the three primary paths included in the transformation process:

The cloud advisory phase:
During this phase, ViON engages with agencies through workshops to develop an intimate understanding of their current infrastructure, facilities layout and future IT requirements. During the assessment, ViON uses industry-leading tools to collect usage information of current technologies, analyze the data and gain insight into how systems operate together in the agency's IT ecosystem.
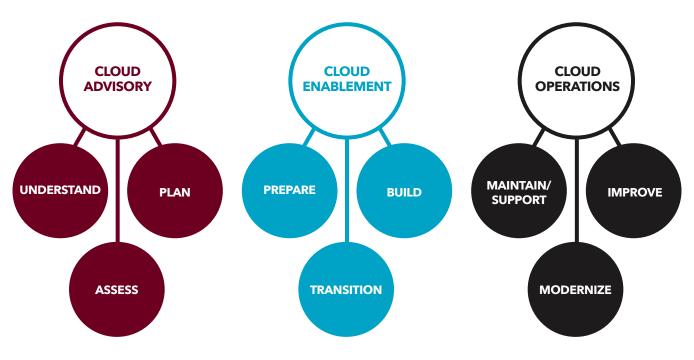
The cloud enablement phase:
This is also known as the development phase of the cloud transformation process. This phase includes sub-phases that focus on the actual development of a new cloud platform. Within these sub-phases, the details of the platform take shape and the performance, availability, and other service factors of the application (once migrated to the cloud) are clearly defined. These sub-phases may include business process re-engineering, complete re-writes of software code or modernizing the code.

The cloud operations phase:
This includes tasks around service transition and sub-phases focused on cloud operations, governance and optimization of the application's new cloud platform.

VION'S TRANSFORMATION SERVICES

CLOUD ADVISORY
- UNDERSTAND
- PLAN
- ASSESS

CLOUD ENABLEMENT
- PREPARE
- BUILD
- TRANSITION

CLOUD OPERATIONS
- MAINTAIN/SUPPORT
- IMPROVE
- MODERNIZE

Conclusion

Moving to the cloud requires a well-devised plan that keeps business priorities top of mind. Agencies should consider upfront how cloud will help them operate more efficiently and effectively and what requirements must be upheld as they transition to this new IT business model. But these aren't decisions they have to make on their own.

ViON's Cloud Services help agencies accelerate the time to value and experience the benefits of cloud sooner. In addition, ViON Cloud Transformation Services provides a fast-track path to successful application transformation.

The key is working with agencies to understand that applications are not all the same and helping them deploy the right cloud architecture – whether public, private cloud or hybrid cloud – for each of their application environments.

> **"We help our customers define what success looks like and work with them to ensure mission success is achieved."**
>
> **Ray McCay, Vice President of Solution Strategy at ViON**

ADDITIONAL READING

IT-as-a-Service 101: Breaking Down What You Need to Know

Mapping Your Path to the Cloud

Build Your Cloud Strategy With Confidence

ABOUT ViON

Designing and implementing innovative solutions that meet dramatically changing IT requirements is ViON's mission. Founded in 1980, we've grown from a small product reseller into a leading systems integrator delivering customized solutions and best of breed offerings from the world's premier OEMs to large public and private organizations.

Known for our engineering expertise and exacting standards, ViON ensures that only those with the highest level of training, experience and industry certifications design, install, maintain and support our breadth of solutions.

We focus on data management, so you can focus on your organization's success. We're on the leading edge of Big Data and Cyber Analytics, Cloud, Video Surveillance and Storage. ViON's cloud-based "as a Service" Program Management Office delivers direct access to the technology you need for today and tomorrow. From the data center to the cloud, let ViON's passion for innovative solutions secure the competitive advantage required for your enterprise.

Learn more at www.ViON.com.

ABOUT GOVLOOP

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 250,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

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