

Industry Spotlight: Focus on Cloud Technology and Computing



Driving Results: How the Right Cloud Strategy Can Make All the Difference

In recent years, cloud computing has emerged as a powerful tool for teams looking to improve efficiency, reduce costs, and better serve their end users. However, selecting the right cloud can be a complex and challenging task. There are numerous cloud providers and platforms available, each with its own set of features and benefits. Moreover, different teams will have unique needs and requirements that may not be addressed by off-the-shelf solutions and will largely depend on the application portfolio being utilized. To effectively leverage cloud computing, government and public sector organizations must understand the potential business outcomes and benefits of cloud selection. One of the most significant benefits of cloud computing is the ability to scale resources up or down to meet demand. This ability to scale, allows teams to easily adapt to changing needs and requirements, without having to worry about traditional buying cycles and making long-term predictions and commitments.

Cloud selection and usage can also drive improved collaboration and accessibility, allowing teams to work together seamlessly, regardless of their location, device, or platform. This in turn enables faster decision-making, better communication, and more efficient workflows, ultimately leading to better service delivery.

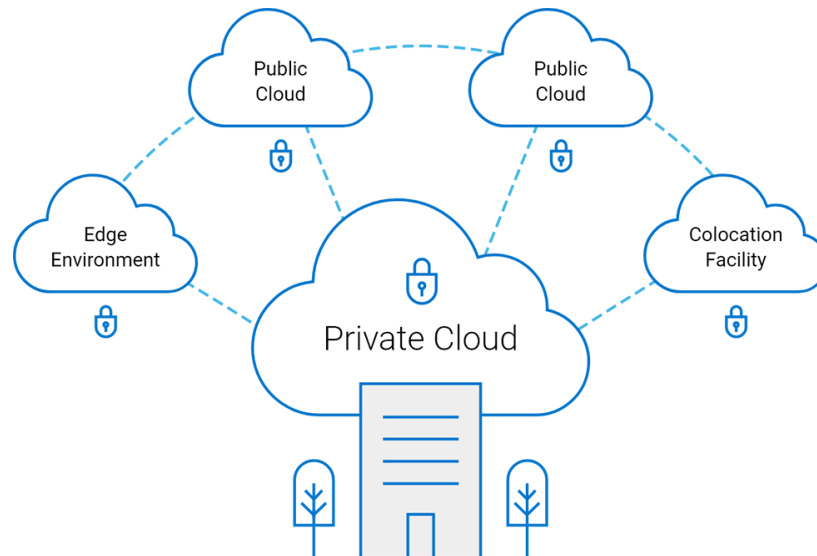
Understanding Why

However, when looking at a cloud strategy, it's critical to understand the outcomes you are striving for and to communicate these clearly to everyone within the organization. These outcomes need to be clearly defined and focused on the long-term business objectives, rather than focusing solely on technical criteria. Rarely is a cloud strategy defined and executed by core IT teams, in most cases the

drive to adopt cloud is driven by individual lines of business wanting access to new services, or by executives looking to expand business capabilities. Whilst IT teams will play a critical role in implementing and managing cloud infrastructure and services, the overall cloud strategy requires a broader view of the organization's operations, risk, compliance, and long-term goals. This outcome, and why multiple cloud models are being adopted, must be clearly articulated from the top down to ensure everyone understands the importance, and can make the best decisions on which cloud models would make the most sense to align to the goals.

The Growth of Hybrid-Cloud

When cloud computing first emerged, the term 'cloud' often referred specifically to public cloud services, where organizations would rent computing resources and applications from a third-party provider. However, as organizations began to adopt these cloud services, they realized that a one-size-fits-all public cloud strategy was not always the best fit for their needs. The government of Canada provided updated guidance in 2023 to reflect the switch from Cloud First, to Cloud Smart¹ and provided a framework for departments to navigate modernization decisions. Some teams needed greater control over the resources or data, some had specific regulatory or compliance needs, whilst others were dealing with legacy applications that struggled to provide any benefit to a cloud migration. To address these needs, organizations began to adopt hybrid cloud strategies, which combined public cloud services, with private cloud infrastructure hosted on-premises or in a co-location facility. Hybrid cloud allowed organizations to leverage the benefits of public cloud, while maintaining control over sensitive data or applications that needed to remain on-premises. In turn, many public cloud vendors recognized this demand, and began providing tools and creating partnerships to better support teams looking at these models, combining resources both on and off-premises.



¹ <https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/cloud-services/cloud-adoption-strategy-2023-update.html>

Today many of OECM's IT-focused supplier partners are supporting government and public sector organizations in adopting hybrid or multi-cloud strategies with new services, recognizing that not every application can benefit from traditional public cloud hosting, and that some teams need to deliver modern services closer to their existing data sources. These services provide access to everything a department needs to build and consume a hybrid or multi-cloud environment. From servers and storage hosted onsite, through to public cloud deployment options and professional services used to build a single point of access from which to provide all the resources and centralize governance. Government and public sector organizations can then take advantage of consumption models that remove the need to worry about traditional data center purchases and utilize options based on usage models regardless of the physical location you need the cloud services.

Location, Location, Location

Some of the early changes in public cloud were driven by teams moving applications there were not designed to run in a cloud model. Either moving only part of an application, resulting in poor performance and increased costs, as the application needed to communicate with other systems still hosted on-premises. Or struggling with resiliency and cyber recovery, since the application was built assuming high infrastructure resilience, and utilized existing IT services for backup and recovery. Building the same level of resiliency required teams to ensure applications were taking advantage of multiple cloud regions and availability zones, and ideally working towards modernization the application to take advantage of serverless computing to maximize benefits of being deployed in a public cloud.

To solve this, organizations can provide access to multiple cloud platforms, allowing teams to select the right location, for the right workload. With the growth of hybrid and multi-cloud platforms, the question becomes one of location and services, focusing on the needs of the application. Driving this is the need for application portfolio assessments, to identify which applications are most beneficial to the organization and how these applications will run in different cloud platforms and locations.

The Government of Canada has also provided a guide on selecting the right cloud services² and many of OECM's suppliers have services to support the selection of the right cloud deployment model, taking into account business requirements, financial cost, data classification, connectivity and physical location.

Cloud Services Everywhere

Cloud Services are about more than just physical location, they provide elastic resources that scale based on demand, access to services and applications not just infrastructure, and delivery of services through a self-service catalog to ensure services can be delivered quickly. With the growth of hybrid-cloud, many teams are looking to drive all these capabilities out of existing data centers, facilitating the need to drive a cloud platform whilst still supporting access to existing resources and traditional

² <https://www.canada.ca/en/government/system/digital-government/digital-government-innovations/cloud-services/government-canada-right-cloud-selection-guidance.html>

applications that will take time (or ultimately be replaced) to better support the benefits of a cloud platform, and drive more resiliency at the application rather than infrastructure level.

OCEM agreements are available to help teams transform existing infrastructure into a true hybrid or multi-cloud platform, allowing teams to build data centers that focus on the needs of today, and scale private-cloud environments up and down, whilst also providing a focus on new services and high-levels of abstractions without given up control. These agreements recognize that a successful cloud strategy is about more than just access to public cloud resources, it's about providing a cloud experience to all teams regardless of the applications being consumed, regardless of the physical location of services today, and understanding the different teams need access to different financial models.

This ultimately enables teams to review an application and its long-term requirements and support a landing zone for that application that truly drives the business benefit being requested. Without this ability to select different cloud options, teams cannot rationalize their application portfolios and align them with the most appropriate hosting model.

Moreover, selecting the right cloud can help public sector teams achieve a competitive edge through faster innovation and time-to-market. By leveraging the latest cloud-based technologies, teams can rapidly develop and deploy new services. This can be a game-changer when it comes to delivering essential services. By understanding the potential benefits of cloud selection, public sector teams can improve efficiency, reduce costs, and better serve their constituents

James Scott

Field CTO, Dell Technologies