OakRocket

Public Sector Cloud Strategy | Getting Ready for 2022

Best Practices - Workforce Development - Cost & Production Optimization

The Covid-19 pandemic has pressed the limits of public agencies and the need to collaborate between agencies. Overnight they needed to ready their environments for remote work, defend against cyber-attacks and optimize IT infrastructure and budgets as they needed to move more to the cloud. . Yet, agency CXOs are faced with institutional and technical barriers when adopting and deploying cloud solutions for storage or compute.

 "...the pandemic has acted as an accelerator for public sector cloud adoption and compressed many years' worth of change into a matter of months." *~Ryan Oakes, managing director of Accenture's global public sector practice.*

 A public sector agency's journey to the cloud should be more than a quick lift and shift. Done with care it's an opportunity to vastly improve service, maximize resources and take on challenges that stretch the imagination. To get there, leadership must view their journey, resources, and the cloud as an evolving ecosystem that gets fine-tuned over time with their current constrained rules. And many optimization strategies used in the commercial sector -- like multiple year spending commitments -- are not as easily deployed in the public sector.

 "...the public sector cloud journey is just getting into gear. For a start, respondents identified significant barriers to progress, such as resource constraints, technical debt, security concerns and skills gaps." *~Ryan Oakes, managing director of Accenture's global public sector practice.*

Many public sector agencies are at the beginning of their cloud journeys. Once the journey starts the critical factor that must be managed is Cost and Resource Optimization. Sadly, the advantages of the cloud are often lost, or are not fully realized when unexpected costs drain budgets, that could have been easily avoided with the

right guard rails in place, that is where OR comes to help. Three areas requiring careful consideration are:

- Architecture and Planning
- Workforce Education
- Cost Optimization

Architecture and Planning

Best practice strategies recommend hybrid multi cloud environments for public sector agencies. The challenge is the need to meet compliance, performance/cost objectives, and mandates that commercial entities don't. Defining objectives and assessing cloud readiness, at the application and resource level should be the first step for any successful adoption initiative.

The most popular public sector cloud solutions focus on long- and short-term storage, disaster recovery cloud enabled contact center solutions, ransomware protection, as well as cost and resource optimization.

"Some enterprises deliberately seek out multi-cloud solutions to avoid vendor lock-in. While this is a valid strategy for increasing availability and uptime, these organizations may risk losing potential volume discounts by a single cloud vendor. - Cloudcheckr"

Beyond cloud compute, storage is mission-critical, the flow of data is growing exponentially, and there are so many options it can be confusing. Cloud providers like Amazon AWS, Microsoft Azure, and Google GCP offer a complete range of services to store, access, govern, and analyze your data to reduce costs, increase agility, and accelerate innovation. Managers can select from object storage, file storage, and block storage services, backup, and data migration options to build the foundation of your cloud IT environment.

Workforce Education

The 2019 World Economic Forum report found that 54% of all workers worldwide will need reskilling or upskilling by 2022.

A few years ago a Federal agency incurred a massive bill when a well-meaning employee downloaded a huge amount of data to populate an analytics tool, incurring a huge expense from the platform provider. With some education, adverse and expensive events like this could have been easily avoided. Cloud operations differ from on-prem in that dataflow out incurs an additional cost.

By migrating workloads and applications to the cloud, many public sector organizations face a new challenge: the need for qualified cloud experts. These experts must know how to work effectively with cloud services and solutions to ensure that new capabilities deliver business value and bottom-line results.

It's not enough to hire practitioners versed in technology — CXOs will need certified technical teams who can deploy and maintain the stack — and can also develop, run, and scale applications securely in the cloud. To retain key personnel and hire new personnel in a competitive landscape, CXOs will need a certified cloud first workforce and implementation partners.

Organizations like Oak Rocket, customize cloud education programs that meet the needs of public sector organizations and the career paths of the team. As teams embrace cloud transformation, they can augment services as the team skills up.

 "...95%of companies believe it is important for digital transformation that the workforce is skilled and knowledgeable with cloud capabilities." -- Aberdeen Strategy & Research.

Cost Optimization and Billing Strategy

Decisions regarding workloads, services, and resources to achieve effective outcomes at the lowest price point takes a holistic approach. There are also considerations around spending commitments and how to manage costs. Whether it's performance, cost savings, compliance, or any number of requirements specific to your business

objectives, having a team on your side with the experience to create successful solutions is in your grasp.

Some public sector organizations are heavy users of cloud compute applications and managing these workloads require more than reports. It takes a methodology, tools, and resources to identify opportunities for savings while avoiding risks. Here is an opportunity to engage a partner to guide resource optimization and billing strategies. Further, some of these organizations buy large blocks of compute and share the cost savings as an added benefit.

Most public sector organizations use the cloud for strategic long-term storage. Record retention, compliance and disaster recovery are also perfect applications for cloud. On prem storage of large amounts of rarely accessed data, storage of tape, or other media no longer makes sense. Offerings like AWS Glacier and Elastic Block Storage (EBS) are superior solutions and can benefit from the same types of savings plans as compute, often reducing data storage cost by 90%. In addition, cloud storage isn't affected by degradation that stored media succumbs to.

"Gartner analysts Brandon Medford and Craig Lowery estimate that as much as 70% of cloud costs are wasted. - Cloudcheckr"

Takeaways

Public Sector CXO's are racing to keep pace with the fast-changing world the pandemic created. For many the cloud is still uncharted territory, but with guidance from a capable partner the risks can be minimized and there are many opportunities previously out of reach.

Just a few years ago it would have been hard to imagine being able to deliver the breadth of services easily accessed in the cloud. Costs and utilization will always be a concern but are now manageable. The utility of an elastic cloud, and solutions offered by providers let you deliver services on demand and then scale back or shut down an offering as needed. No doubt, there is a learning curve, but it is flattening quickly as cloud adoption continues to spread.

About Oak Rocket

Oak Rocket is a leading minority woman owned business technology consulting and services firm. We deliver Cloud Adoption, Cost Optimization, Digital Transformation, Grant Management, and Professional Services that let you move like a rocket and be successful. Founded in 2013 with the vision of unleashing the potential of the cloud we have grown into a leader in cloud infrastructure. Oak Rocket clients get the benefits of our years of experience and focus which enables us to work with you to deliver thoughtful end-to-end cloud solutions while avoiding missteps.

As the CXO's cloud guide, let us work with you:
- Plan, migrate and optimize your workloads to the cloud.
- Cost Optimization and Billing Strategy for compute and storage
- Provide workforce development needs with onsite or online certification programs
- Augment your existing teams with certified cloud practitioners

Architecture and Planning:

Including basics like building workloads that ensure the most effective use of resources to performance/cost ratio takes.Taking a holistic approach is critical to architecture and planning. At Oak Rocket our Storage competency can help any agency analyze and configure the correct solutions for your current and future needs.

 Let Oak Rocket work with you for:
- Well Architected Reviews (W.A.R.)
- Managed Demand and Supply Resources
- Reference Architectures

Cloud Cost Optimization - **Planning and Underutilization Pay Back Guarantees**

- Real-time adjustments to cloud compute commitments based on the environment's capacity requirements.
- 24/7 continuous cost optimization
- Success based pricing model.
- Frictionless onboarding – Fast results

OakRocket

Our Capabilities:

CLOUD OPTIMIZATION	CLOUD SECURITY	CLOUD STRATEGY	CLOUD OPERATIONS
Platform Customization	Identity and Access Management	Digital Infrastructure Assessment & Discovery	Disaster Recovery Support.
Cost Optimization	Threat Detection and Monitoring	Cloud Transformation Strategy	Infrastructure assessment
Cost Allocation		System Integration Strategy	
Security Monitoring	Data Protection		Rotational data method
Inventory Reporting	Infrastructure Protection		AWS Cloud Integration
Utilization Metrics	Compliance and Data Privacy		Disaster Recovery solution
Automation			

Contract Vehicles:

Small Business Status: WOSB

Primary NAICS: 541611 , 511210, 518210, 519190, 541511, 541512, 541519, 541612, 541613 and 611420

NASPO Cloud Solutions, 12 Participating Addendums(California, Connecticut, Florida, Hawaii, Illinois, Mississippi, Missouri, Nebraska, Oregon, Utah, Vermont, Virginia) TX-DIR Cloud Services Contract

G2G Marketplace

NASA SEWP V

NITAAC CIO-CS

SeaPort NxG – Cloud Engineering and Management Services

NCPA

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