Why Your Cloud Strategy Needs

A Data Strategy

Only by harnessing your data with the right platform will your cloud strategies succeed.
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Cloud Is a Critical Enabler of Transformation but Increases Complexity

Retain and Optimize
Tightly Coupled Apps, Slow Deployment Cycles

Lift and Shift
Primarily using Cloud IaaS

Re-Factor
More Modular, but Dependent App Components

Re-Architect
Loosely Coupled Microservices, and Serverless Functions

More data centers to monitor and secure

More data across an expanded attack surface

More complexity and unpredictability

More frequent releases and risk
The New Cloud Challenge

Every organization is moving to or is in the cloud out of both necessity and the promises that come with the technology. Spurred initially by cost savings, adoption has evolved to be about competing with disruption from digital-native upstarts. Every organization has been forced to become a digital one, and they are turning to cloud infrastructure, platforms and services to transform faster. Users want Venmo-like experiences with their banks and Amazon-like interactions with other retailers. This trend has carried over to the workplace where employees now expect these same kinds of experiences.

Leaders know that “digital transformation” is no longer a buzzword; it is an existential necessity. No CXO needs to be convinced of its importance, as they’re all looking to innovate faster, more securely and with greater efficiency.

The cloud opportunity is more than about meeting consumer expectations, there are of course the technology benefits. SaaS apps are usually easier to use and set up than clunky on-premises systems, and scaling cloud services is much simpler than purchasing and setting up new hardware — all at a potentially lower cost. The wide range of services available in the cloud makes it so that organizations can plug in for faster development and cost alignment with their needs, regardless of size or business requirements. Additionally, shifting services to the cloud allows organizations to invest time and resources on projects that differentiate and grow their business instead of managing internal IT systems.

In short, organizations are looking to the cloud to accelerate their digital transformation journeys.

To realize the benefits of the cloud, organizations must employ a strategy that:

- Ensures real-time visibility into the health and performance of critical business workloads that are running in the cloud, as well as the cloud services themselves
- Controls costs to realize economic benefits as demands also grow
- Maintains a strong security posture in the cloud
- Confidently adopts and operationalizes emerging cloud-native technologies and best practices to accelerate innovation

Still, organizations must keep in mind that the apparent simplicity of adopting the cloud adds complexity.

Adopting the cloud takes time, and few organizations live in just one state of their transformation journey at any one time. Some apps and services continue to live on-premises. Others are lifted and shifted to cloud infrastructure without much modification. Many business critical applications are refactored to take advantage of the cloud while others are completely rebuilt to be cloud-native. The outcome of this multi-stage journey affects all technology teams across the organization.
IT teams now need to monitor and manage services across multi-cloud environments on top of existing legacy infrastructure. Mismanagement can mean costs run rampant under consumption-based pricing models. And more systems mean more interdependencies and potential points for failure. As a result, organizations often experience greater downtime when things go wrong as their existing tools are ill-equipped and their visibility is limited.

DevOps teams — in which developers are on call — are managing more complex applications with hundreds or thousands of interdependent microservices. Continuous integration and continuous delivery means that code changes happen in near-real-time and the chances for errors are greater than ever, a critical challenge in a world where slow is the new down.

Security teams have to manage not only what’s in their contained environments, but must also strive to retain control and visibility over data flowing across a greater number of locations, applications and devices as the attack surface expands.

Consider for example the increasing complication in developing, monitoring and securing a website. Static, information-providing websites, were deployed in an on-premises environment. Monitoring was relatively straightforward and security risks were manageable. Everything that needed to be tracked, such as latency and CPU usage, was straightforward to monitor. Both the web developers and operations teams had a clear understanding of site health.

When consumers started demanding new experiences — e.g. ecommerce, mobile apps with checkout — website development and deployment had to drastically change. The first move to the cloud for many organizations helped meet this demand by better handling seasonal spikes, and taking advantage of the new services cloud providers were offering. Customers were more satisfied, but the teams supporting the apps had additional blind spots.

Today, customers expect a seamless connected experience with retailers where they are able to place orders confidently on an app or website with shipping to their home or store pickup. As a result, companies must connect their various systems together like never before. Developers now rely on connections to third-party payment processors, ERP systems, and much more.

Most organizations use elastic cloud infrastructure to handle surges in demand to quickly scale up or down as needs arise, but the overall impact of the cloud on business is much greater. The potential points of failure, as well as the sensitivity of information captured, has exponentially increased. Managing this new complexity can be daunting.

The same technology journey helping organizations to transform can quickly become a liability if mismanaged — impeding long-term success. Fortunately, there is one constant of this cloud-driven transformation that is also the key to unlocking these challenges: Organizations are now generating and capturing data at a greater volume, variety and velocity.

With the right data platform, it’s possible to develop data-driven strategies that accelerate and enable existing and new cloud efforts.
The Data Opportunity

In this new Data Age, there will be two types of organizations: those that effectively leverage their data to monitor, secure, and drive the business, and those that don’t exist. A Splunk and ESG report shows that data innovators — those committed to using data across their businesses — realize a 12.5% greater profit growth rate than those that don’t.

Finding success is easier said than done. It can be difficult to get a clear and holistic picture across all technologies — cloud and on-prem — in an organization. Data is now scattered across multiple systems and endpoints. It’s being generated constantly with less structure and standardization. Timescales have vastly accelerated, requiring different monitoring approaches that must still produce results in real time.

The disparate and disjointed nature of the cloud — whether it’s dozens of specialized cloud services or a hybrid environment — means a tremendous amount of development and maintenance to gain all the potential benefits.

To manage the complexity and capture the value of moving to the cloud, organizations need a platform that:

- Works for them wherever they are on their cloud journey
- Takes in any kind of data from any source and across any timescale
- Scales to meet the growing demands of the organization
- Empowers everyone in the organization to turn data into action
Issues stemming from the cloud do not only manifest when migrating, each phase of the cloud journey introduces new complexities. But the right toolset can ease the transition, enabling the realization of the cloud’s promised benefits.

Organizations can take advantage of all that the cloud has to offer to meet business requirements without sacrificing manageability. Teams can maintain stability and visibility while creating delightful customer experiences and optimizing cost.

Splunk, the Data-to-Everything™ Platform, is designed to help realize the promises of the cloud journey. Splunk can ingest and analyze data of any structure, source and timescale so you can take the right action. It meets organizations where they are in their cloud journey, so they can effectively manage and protect the flow of data in everything, from their on-prem and cloud infrastructures to their cloud-native apps and services. The results are transformative.

Realize the Cost Benefits

With Splunk, organizations can monitor spend in real time, forecast costs and identify inefficiencies. They can confidently shift to operational expenses with lower upfront costs and increased demand elasticity. They can truly take advantage of the clear benefits of the cloud. No longer will teams operate in the dark with limited control over provisioning, lack of visibility into inefficient code or orphaned utilization that can drive up costs.

Retain Visibility and Control

Cloud vendors try to make it easier for organizations to operate by providing their own tools for visibility and management. The Data-to-Everything Platform provides a single pane of glass so organizations can keep a finger on the pulse of everything. Assets and services spread across different monitoring tools may present risks, but they can be managed. And increased attack surfaces can be understood and visualized, ensuring that benefits are realized regardless of differing toolsets and processes.

Ride the Data Wave

The right data platform not only offers a clear perspective of all the data in an organization, it becomes the bridge between technical and business systems to ensure the best outcome. Operation centers and boardrooms no longer have to remain separate. Splunk customers are prepared to handle the exponentially growing rate at which data is being generated. They are using it to optimize their costs and inform their investment decisions through data to deliver exceptional customer satisfaction — capitalizing on data’s value.
There is a key element about cloud complexity that cannot be overlooked — monitoring. Using traditional solutions that have been adapted, updated and patched to seemingly meet cloud demands is a deferment at best, and ultimately self-defeating. Not only were they not built for the cloud, they are often unaware of their own blind spots. They lack the necessary perspective to monitor and manage the slew of services, applications and infrastructure changes that come with cloud-driven transformation. Traditional monitoring tools focus on things that are known to be high risk — the “known knowns” in a simpler environment.

A specific application could be made up of thousands of loosely coupled microservices and serverless functions that exist across multiple on-premises and cloud environments. Organizations must capture and quickly analyze all data, irrespective of volume, variety and velocity. Traditional monitoring isn’t enough. It’s why teams need “observability” that analyzes metrics, traces and logs to detect when a problem is happening, where and why.

Only with this new capability of observability will they have the opportunity to act based on not only those “known knowns,” but also the “unknown unknowns” — the problems they didn’t even know could occur. This is the fundamental idea behind observability and it is why organizations must not only monitor their legacy services, but also invest in an observability strategy to empower digital transformation.

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Data Strategies Powered by the Right Data Platform

Splunk, the Data-to-Everything Platform, supports the spectrum of infrastructure and applications no matter where they are hosted so Security, IT Operations, and DevOps teams can investigate, monitor, analyze and act on all their data. The possible use cases are endless. For example, organizations are ensuring business continuity with Splunk by managing surges in demand across their systems and finding and remediating both technical issues and security threats as they arise. Security and IT teams are leveraging Splunk’s workplace and remote insights solutions to ensure safety and productivity in the ever-changing global environment. DevOps teams are significantly improving their rate of innovation and ensuring a consistent customer experience. Moreover, organizations are attracting and retaining talent by making data universally available to their teams.

From the UK’s National Health Service to the US Census Bureau, organizations are leveraging Splunk to take data to their cloud strategies so they can finally realize the promises of cloud-driven business transformation.

You can too.

**Now ask yourself some questions:** Are you prepared to manage the complexity posed by your cloud adoption? What is your data strategy for your cloud strategy? Do you have a data platform in place to help you achieve this strategy? How will your cloud data strategy help you achieve your business transformation objectives?

Whatever stage you are in your journey, Splunk can help you answer these questions. Let us show you how to take on the cloud the right way with Splunk Cloud™. Leverage your data to solve operational complexity, achieve end-to-end visibility and secure your data journey and modernization efforts.
Get Started.

Create your data strategy for your cloud strategy with Splunk Cloud.

Learn more