

# Cloud Transformation: From Why to How

4 questions IT leaders ask when moving SAS® to the cloud



Analytics Innovation Principal Director, Accenture

#### Ready to make the move to the cloud?

When it comes to *why* you should move your analytics to the cloud, the benefits are compelling. They include:

- · Performance improvement and increased agility.
- Streamlined infrastructure requirements.
- Expanded access to data and insights.
- Data storage improvements.

As more organizations get serious about making the move, they've shifted their focus to another equally important question: How to do it?

So far, this has been a more difficult question to answer because organizations are still learning how to take advantage of cloud infrastructure options. Plenty of organizations have run lightweight

commercial analytics solutions from the cloud. But mature, enterprise-class analytics solutions or platforms? Not so much. As they've mobilized to put other significant parts of their IT infrastructure on the cloud, many have left analytics untouched due to its complexity and reach.

Diane Hatcher will tell you that now is the time to move analytics to the cloud, because she's done it successfully for many clients.

Diane is an Analytics Innovation Principal Director in the Cloud Analytics team that is part of Accenture Applied Intelligence.

Accenture is a leader in helping clients move SAS to the cloud - how to do it, which pitfalls to look out for, and which opportunities to seize along the way.

So we asked Diane to answer some of the toughest questions IT leaders ask once they're knee-deep into their own SAS cloud-integration initiative. Knowing that her answers would be helpful to anyone starting this journey, here's what she said.

#### Q&A with Diane Hatcher, Analytics Innovation Principal Director, Accenture

#### $\mathbf{Q}$

What are the main issues we need to consider if we want to migrate all our SAS workloads?

#### A:

SAS processes often become ingrained and integrated into core business processes - after a while, they're inextricably linked. That's a big part of how SAS helps drive business outcomes. We're talking end-to-end processes - from ETL and data governance to analytics and visual reporting, extended throughout the organization.

As a result, SAS workloads are just one component of a migration. Maybe a better question here is "How will we migrate our SAS environment?" Because SAS is really an entire ecosystem - one that engages with a lot of dependent and adjacent systems. I think of it like this: You're not just moving your household to the cloud and saying goodbye to your neighbors forever. You're working hard to maintain key connections with those neighbors, and in many cases they're moving to the cloud with you.

Another key aspect to consider is the cloud environment itself. Public cloud providers offer services that cater specifically to corporate enterprises, particularly around security and service integrations. Many organizations take advantage of the newness of the cloud as a clean slate for establishing updated policies and configurations that adhere to modern governance standards.

For example, many policies that work well on-premises won't work the same way in the cloud environment, either by design or because IT wants to do things differently. With authentication policies, for example, on-premises users may be accustomed to a user/pass system, but AWS may require user authentication tokens. You'll need to think through environment-level dependencies like these as you go. Environment-level dependencies are usually the ones that trip up a migration project - they are discovered after the journey has already started and need to be addressed before continuing.

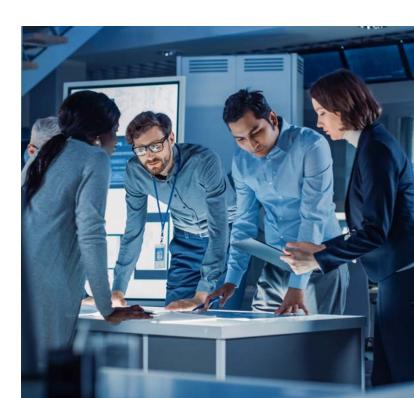
#### Q:

Our data sources will remain on-premises for the foreseeable future. How can we make sure SAS can still access the data from the cloud?



You'll still be able to access on-premises data from SAS on the cloud. The key issue, of course, is to understand how much data is being accessed from on-premises into and out of the cloud. In many cases, the data sizes per query are manageable, but I/O bandwidth could cause performance delays if there is a lot of data moving.

In those cases, cloud vendors now have tools that allow you to easily create data marts in the cloud. They recognize that, for some systems, it makes sense to sync a subset of enterprise data in cloud-based data marts, giving users a full cloud-based solution. This structure for staging data in the cloud can ease the path to full cloud transformation in the future. The approach eliminates the need for users to know where enterprise data is stored (on-premises vs. cloud), improves performance and user experience, and essentially future-proofs the data aspects of cloud transformation. That's a big deal – and SAS fits right into this strategy.



#### Q:

# How long will it take for us to migrate our SAS environment to the cloud?

## A:

The amount of time is dependent on the scope of the SAS environment, your organization's capacity to facilitate the migration, and the maturity of your cloud environment. The best way to start is to conduct a detailed assessment of the current environment to understand how the SAS environment is working today. This information can then drive the approach and road map for your migration.

The good news is that you can rely on SAS partners to help you with your migration. SAS has a strong ecosystem of partners, several of whom focus on SAS installations and deployments.

Accenture, a SAS Platinum partner, has a SAS practice focused on migrations to the cloud. We have an established methodology and accelerators that analyze the current state of your SAS environment, which drives our recommendations and road map for how to proceed.

#### Q:

We understand the benefits of cloud platforms. But how does running SAS in the cloud help reduce total cost of ownership and improve user experience?

## A:

I work with a lot of clients who are pursuing large-scale, cloud-based transformation initiatives that reach well beyond their SAS investments, and they've simply held off on moving SAS to the cloud. When faced with the prospect of finally making that move with SAS, they want to know if the benefits are worth it. I think many of them underestimate just how much work SAS has done to optimize its capabilities on the cloud.

SAS® Viya® is built for the cloud, which provides a level of elasticity and scalability that they haven't experienced on-premises. Cloud instances leverage the latest computer technologies and are always being updated. SAS automatically benefits from the chiplevel optimizations Intel has made, accessing powerful math libraries designed to perform advanced analytics. Cloud-specific features such as automatic tiering help organizations get world-class storage capabilities designed to minimize storage costs – cloud services automatically archive old, unused data, while keeping it within easy reach if and when the data is needed. SAS performs great on the cloud because it has been built to benefit from a modern cloud architecture.

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Diane Hatcher,
 Analytics Innovation Principal Director,
 Accenture

# You'll have more questions as you get started moving SAS® to the cloud.

We know because we've already fielded many of them. We've been working directly with customers like you to help them realize the full value of analytics in the cloud. Whether you need insight into your specific opportunities, or tools and accelerators to facilitate a smooth transition, we're ready to help.





Intel Inside. Successful analytics initiatives require tight alignment between hardware and software in the hands of skilled technologists and strategists. That's why the ongoing collaboration between SAS, Intel, and Accenture is so important for clients. Together, we know how to connect all the dots on analytics strategies to deliver practical solutions that deliver real, measurable results - at any scale.





At SAS, we love bold questions. And when we combine our analytics leadership with the innovative technology and expertise of our partners, we help our customers turn data into answers. That's the kind of curiosity that moves the world forward. That's the **Power of the Partner**.