



# Empower Your Organization with Cloud-Based Analytics

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# The Transition to Self-Service Cloud Analytics

*A Q&A with Sam Liu*



**Q: Are companies facing new pressures to embrace a robust business intelligence (BI) platform?**

I think the answer is an unequivocal yes. If you look at where BI was just five years ago, mobile, self-service data discovery, and the cloud were almost nonexistent, let alone a top-of-mind priority. Today, however, companies must cope with rapidly increasing data volumes and an explosion of data sources that just weren't a factor five years ago. On top of this, the massive influx of data doesn't follow a 9-to-5 schedule. Data analysts need to turn data into insight on their own terms, which is why mobile BI is becoming so important. Companies that have invested millions in an analytics platform without mobile are now, with mobile on the rise, looking for a robust BI platform that can integrate or adapt with new technologies. MicroStrategy recognized the mobile wave coming and built mobility into its analytics platform. Because of this forward-looking approach, customers can ensure that they have the most up-to-date capabilities and features to make sure all their customers are successful. We are in a big cloud movement, and companies need to ensure that their BI platforms are ready to move to the cloud in an easy and seamless transition.

**Q: Why is a mobile strategy important for effective analytics?**

I think if you were to poll mobile BI users, most, if not all, would not take kindly to reverting to a desktop-only environment. The primary reason a mobile strategy is important for effective analytics is that it empowers the end user; having data in the palm of your hand with which to make critical decisions on the go can be liberating, and it can result in insights that are faster, more efficient, and more powerful than those gleaned from analytics performed in a desktop-only environment.

**Q: What challenges may a company face when migrating to – and running their business in – the cloud?**

While there are numerous tangible benefits of migrating to the cloud, there are also pain points, challenges, and concerns. Preparation for the migration is essential to mitigate these concerns. Decisions must be made about whether to undertake a piecemeal or big bang

cloud project, whether the ultimate destination supports the company's current setup, and whether the company has the appropriate tools in place for a cloud environment. Cost is, of course, another concern that organizations must weigh against the cost of inaction. Then there are the issues of data security and post-migration validations.

Customers should look for a vendor that lifts the burden of these concerns and issues with a simple migration path, which could include the ease of a single-click migration that backs up a customer's complete environment into one file, which is then easily uploaded into the cloud. MicroStrategy on Amazon Web Services (AWS) provides a simple and easy way for customers to migrate to the cloud today, with additional simplicity forthcoming.

**Q: Is there a perception that the trade-off in a transition to analytics in the cloud cedes control over a company's environment?**

There may have been a tinge of truth to this perception in the very early days of cloud analytics, but it's not an accurate reflection of what's happening today. Many cloud vendors provide customers with the flexibility and power to do anything with their instances and platforms. And many, including MicroStrategy, provide customers administrative access to everything. In fact, MicroStrategy is deployed into the customer's AWS account; MicroStrategy has no access to the account, which provides the customer with more control and security. This frees customers from having to find a way to get around a multitude of restrictions any time they want to get something done. It's our view that customers should look for vendors that allow them the most administrative power and flexibility so that they don't feel as if the cloud vendor has the upper hand in the partnership.

**Q: What is the governance model for self-service cloud analytics?**

This is a common question from customers. In fact, it's asked so frequently that some time ago we prepared an outline with the seven key considerations for data governance:

- Get buy-in: As with any initiative, getting buy-in is crucial. The entire organization needs to recognize the value of having an Enterprise-wide data governance initiative.
- Identify key team stakeholders: It's the stakeholders' responsibility to ensure their teams adhere to established processes to build a more collaborative organization.
- IT and business staff need to talk – directly: To make it work, governance processes need to be fluid and open, and the IT staff needs to continuously monitor and prioritize how it promotes essential key performance indicators (KPIs) into a governed framework – and be prepared for recurrent change.
- Appoint a data steward: A data steward is a critical player in helping curate data and foster communication between teams.
- Standardize your technology: Make sure all users are building with the same tool and format.

- Take baby steps: Pick the most important application and start there. Even if you are only able to certify or promote a single application a month, that's 12 critical applications every year.
- Don't let short-term wins affect long-term strategies:

We provide additional information on data considerations in this [blog](#), which provides an in-depth look at the causes and dangers of data contamination and how adherence to the seven considerations detailed here lead to trusted, governed self-service analytics and effective collaboration.

**Q: Is there typically a reduced role for an IT department in administering cloud analytics to the business?**

The short answer: it depends. Really, though, it's contingent on the level of services the customer needs. If the customer does not want to manage the infrastructure, they can work with the partner on how to manage the environment for them. This will reduce the role of the in-house IT department. But if the customer merely wants the analytics platform in the cloud with little services, then the organization will still need IT staff to manage the environment. For example, if customers want to make sure that their data is compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) then the customers must perform this compliance exercise themselves.

Another example of a provided service is whether the vendor provides a provisioning tool to instantly deploy the analytics platform on the cloud environment. If the vendor does not, then the IT department must download, install, and configure the analytics platform – a process that could take days to weeks to complete.

So the answer to this question is really up to how many services, features, and capabilities the customer wants.

**Q: How do you dispel the notion companies may have that consuming analytics is best left to a dedicated staff of professional analysts?**

It's true that the traditional concept of enterprise analytics rested on the notion that only a select few analysts could turn data into insight. One reason for this is technology limitations; querying the IT department to return a dataset for analysis took time, and the fewer analysts interacting with IT staff, the better. Another reason is that the business didn't have to cope with the volume of data we're seeing today. Mobile BI changes the game. Now, limiting insights to just a few people limits how much your organization will know. When anyone in the business can analyze data from any part of the organization and from anywhere in the world, organizations can gain information that they otherwise would likely have missed. Obviously, there will need to be governance in place to know what data to trust, but that's why there is a governance process or model that we mentioned above.

People want self-service analytics with real-time data. Waiting hours, days, or in some cases, weeks for someone to create the analysis for you is an antiquated notion of what enterprise analytics should be. End users know that the tools and capabilities exist to provide them with the exact report they need at the exact moment they need it. Standardized, static old-school reports and dashboards are, simply put, not as relevant as they can be or need to be for a dynamic business. Personal analytics that can be administered throughout the organization foster creativity and collaboration and empower end users to recognize themselves as stakeholders in extracting value from the data that flows through an organization at an ever-increasing volume and pace. ■

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Mr. Liu is a Product Marketing Manager at MicroStrategy, responsible for MicroStrategy on AWS. Before joining marketing, Mr. Liu was as a member of the Technology and Consulting organization and still works closely with those teams. He holds a Master's degree from Cornell University in Applied Statistics. He is an avid foodie and sports enthusiast.

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# 3 Things that Happen When You Collaborate in the Cloud

By Sam Liu



Good dashboards contain valuable information that can be used to make critical business decisions. But, to be truly effective, they need to be able to be shared and collaborated on across different teams and departments.

Putting dashboards in the hands of the right people can lead to new insights and better decision making. When it comes to distribution though, some organizations still rely on sending email attachments back and forth, but this leads to version control issues—not collaboration.

The cloud is the perfect solution—it gives everyone the ability to manage, share, and edit dashboards on a secure cloud server, empowering teams and organizations to use data and analytics to make smarter decisions—together. Here are three things that happen when you start collaborating in the cloud:

**Teams Move Beyond Excel Spreadsheets.** Excel spreadsheets are bad for governance and for collaboration. With different team members saving their work in decentralized locations, data can quickly become contaminated. When everyone on your team can download a powerful analytics tool and share dashboards in the cloud, organizations can finally move beyond static spreadsheets and ensure a single version of the truth for enterprise data.

**Teamwork Gets Much Easier.** Collaboration significantly increases the usefulness of any dashboard. When one person creates a dashboard, their work only displays data from a single perspective. But when additional users collaborate on a single dashboard, they add valuable insight that helps to make the final product beneficial for a much wider audience.

For example, imagine that a digital marketing team creates a dashboard from Facebook and Twitter data using Google Analytics. This data is important to the marketing team because it allows them to analyze KPIs including clicks, likes, and retweets. Instead of keeping the dashboard to themselves, the marketing team could share that dashboard with people on the sales team who have access to Salesforce data that shows all the touchpoints for your company's customers and prospects. By blending sales data together with Google Analytics, sales could identify the ad content and social posts that have the biggest influence on their deals.

**Users Can Publish Their Work to Thousands in Seconds.** Once a dashboard is finalized, users can easily share their work with the entire organization. Dashboards can be shared as a PDF, through proprietary MicroStrategy files (.MSTR), or in the cloud. These dashboards can also be personalized—allowing individual recipients to receive certain views, depending on their job purpose. For example, the sales data referenced above could only show data for the prospects and customers assigned to the recipient.

According to a recent Deloitte, EMA and Informatica State of Cloud Analytics Report, the top three business drivers of cloud analytics adoption today are enhancing business processes, improving customer experience, and better collaboration.

At MicroStrategy, our MicroStrategy on AWS offering empowers teams to manage, share and leverage their data faster than ever before. ■

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# The 10 Capabilities Your Enterprise Cloud Analytics Platform Needs for Success

By Chris Whaley



Chris Whaley

The shift to the cloud is rife with opportunity for enterprises, and perhaps none are quite so strategic as placing critical insight into the hands of decision makers via cloud analytics platforms. Yet, as the analytics landscape evolves, not every cloud analytics platform is created equal. Finding the right solution hinges on 10 critical capabilities for success at enterprise scale.

Impactful cloud analytics platforms bend to the needs of users rather than the other way around. That's why it's essential to know if a platform delivers the architecture and functionality needed for deployments at enterprise scale. After all, this needs to work seamlessly for users at all levels and departments across the organization.

Here are the top 10 critical capabilities for cloud-based analytics platforms:

- 1. Simplified Enterprise Deployment:** The cloud exists to simplify deployment. In other words, to remove barriers that prevent organizations from fast growth. Yet, the majority of cloud software and platforms still require IT expertise to download, install and configure. Fortunately, some analytics platforms remove these steps. Look for analytics environments that are deployable by any user with the touch of a button. Find a cloud platform that can quickly deliver insights to daily decision makers and your data-driven business intelligence (BI) journey will proceed on the path of least resistance.
- 2. Global Availability:** Enterprises that serve customers outside of the U.S. know that storing data locally offers major benefits. Beyond faster connections and lower latency for customers, it often means proper compliance with local laws and regulations. The same is true for a cloud analytics platform. At the end of the day, a platform with a global presence can make the difference from decisions that save time and money to those that lose resources.
- 3. API-enabled Operations:** Utilizing a cloud analytics platform that operates on an open API and provides connectors means organizations gain unlimited flexibility to create custom workflows and dashboards. This includes making use of personal web pages that are branded with the same look and feel of the organizations. API's can also

be utilized in natural language generation, AI, machine learning and other emerging technologies such as smart voice devices (Alexa, Siri, Google Assistant) in your analytics environment. By providing APIs, organizations can manage the environment at scale, rather than manually. Utilizing an open platform, enterprises can consistently brand and govern their entire platform while getting the most out of existing investments and future-proofing the organization for changing trends.

- 4. Disaster Recovery and Failover:** Cloud analytics platforms are strategic to an organization's everyday business. This means planning for the worst case scenario. What happens if the system crashes or fails? Plan ahead for these events. Ensure that your platform is hosted on a cloud service provider that makes it easy for customers to implement disaster recovery plans. Ask hard questions of your platform provider and evaluate whether or not they can help you execute an immediate recovery plan – unanswered questions in this area can directly lead to lost revenue.
- 5. Centralized Administration:** Platforms that give administrative power to the user are both beneficial to the workflow and cost effective. For example, many analytics environments don't need to run outside of work hours, or have clear peak usage times. Dictating the size of your environment given critical hours can save resources. Even more, scheduling run time in advance means nobody has to "flick the switch" and environments are fired up and down through automation, providing an additional layer of convenience for platform users.
- 6. Auto Scaling:** As organizations amass vast amounts of data, their on-premises infrastructure often struggles to keep pace. This creates potential plateau issues for an analytics platform with evolving needs. A single data stack that an enterprise uses today might grow 10x tomorrow. Purchasing new and optimizing infrastructure is costly and likely represents a capital investment that will become obsolete in just a few years. Platforms that take advantage of automatically scaling environments up or down based on demand means agility and fast growth.
- 7. Seamless Upgrades:** Technology vendors are constantly offering upgrades to support additional functionality and prevent security risks. Organizations are hesitant to dedicate offline time or resources to tedious upgrade tasks. When platforms are hosted in the cloud, upgrading environments can be as simple as opening a browser with one click. This creates a level of governance on-premise installations could only dream about. Ask your analytics platform provider how they handle upgrades – do they take full advantage of cloud infrastructure?
- 8. High Performance and Reliability:** Data is the core of today's modern organizations, and without fast, reliable access to KPIs and data analytics, organizations risk losing their competitive edge. Just because you are in the cloud does not mean that you won't be slowed down by other companies competing for the same resources. By working with a provider that uses a single tenant approach, your organization will never have to question if other customers are constricting your performance and reliability.

9. **Data Connectivity and Migration:** Your analytics platform shouldn't inhibit productivity in any form. Whether you want all your data or just part of it on your analytics platform, there should be no obstacles standing between you and your data analytics. It's critical to find a platform that provides flexibility to connect your data to any data source.
10. **Data Security:** When it comes to data storage and management, security is the number one concern. Luckily, organizations are placing more trust in the cloud and it's working to their benefit. Keeping up with different security regulations and protocols across industries and regions can be a big (and expensive) hassle. Instead, finding a platform you trust that's compliant with the needs of your industry is integral to both cost and efficiency. Additionally, be sure that your platform has processes in place to notify customers immediately of any lost or potentially compromised data—a quick response is of the utmost importance following security threats large or small.

With these 10 critical capabilities at your disposal, your team will be in a strategic position to not just have access to analytics, but also experience the full benefits that cloud platforms have to offer. Having two or three of these capabilities isn't enough for an enterprise grade analytics platform. Utilizing each and every one of them will separate the leaders from the rest of the pack. ■

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Chris Whaley is Senior Director, Cloud Operations at MicroStrategy. He brings over 25 years of engineering and global IT architecture experience, with previous roles in wide-area network design, virtualization, and data center deployments. More recently, his focus has been on enterprise cloud solutions and consulting for large BI implementations focusing on communications, ETL, and data warehousing. He has provided technical leadership for many cloud customers and plays an integral role in the development of MicroStrategy's cloud products. As a cloud operations leader, Chris understands security and solution requirements, and helps ensure the success of customer implementations.