Do Your Analytics Belong in the Cloud?

Where to look before you leap.

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The Challenge

Moving data analytics to the cloud can be a leap forward for your organization—a cost-efficient way to gain speed, flexibility and immediate access to the latest technology advances. You'll find a growing array of vendors eager to show you how easy it is to make the move and reap the benefits.

But moving analytics to the cloud in a cost-effective, flexible and secure way is much more complex. It takes a healthy dose of strategic self-knowledge together with solid planning, research and preparation. Some companies get so tied up in evaluating the prospect of cloud analytics that they don't get around to executing on it. We have a better idea.

Point B’s Perspective

Point B helps organizations make timely, informed decisions about moving analytics to the cloud. We begin where most good business decisions begin: with a clear-eyed assessment of the strategic benefits and risks. When moving analytics to the cloud is in an organization’s best interests, we help identify a solution based on its analytic business needs, with a flexible cloud architecture and solid knowledge of the vendor marketplace.

If your organization is thinking about moving some or all of your business analytics to the cloud, here are a few key things to keep in mind:

Know your needs; establish performance criteria

The better you know your current and future requirements, the easier it is to decide whether to move analytics to the cloud—and, if so, which vendor solution to choose.

What are your performance criteria for elasticity, data volumes, variety and velocity? Understanding how these key performance criteria will be evaluated is critical to designing the right data architecture, especially in the cloud. It’s essential to know how much elasticity will be needed to balance peak compute performance and demand, data volumes versus compute capacity, and what types of data will be managed in the future (structured, semi-structured, unstructured).

What analytic functions are most valuable to your organization? The answers will help you evaluate data requirements and sourcing.

Architect for change and flexibility

A clear information architecture should advance your business strategy, enable growth, and support new
capabilities. It should serve as the foundation for migration resource planning and budgeting.

You'll want an architecture that accommodates change as on-premise applications move to the cloud, new applications become mission-critical, and data volumes continue to grow. Build in the flexibility to avoid the risks of heavy vendor lock-in, high switching costs between providers, and unanticipated cost changes in the future. Choose architecture methods and tools that give your organization the flexibility to change or move if needed.

Know your needs when you choose your vendor, and design an architecture optimized for its pricing model. For example, one vendor charges for a specific amount of compute capacity for a specified time period. Another vendor prices purely on utilized compute capacity; time is not a factor. Costs can add up quickly if you don't plan your compute, network, storage and high-availability needs.

You may also want to evaluate how to provision your users with specific amounts of capacity, and how to charge them. Most on-premise systems have almost no incremental cost for usage, but cloud platforms do. Your platform and billing processes may need the ability to throttle or chargeback for utilized capacity.

**Understand your data warehouse needs**

Cloud data warehouse platforms have radically different pricing models. Pricing usually depends on a combination of storage, computing and transmission. Knowing these current and expected values for your organization lets you compare costs in a meaningful way. To avoid any costly surprises, outline several scenarios that span a range of "what if" possibilities.

**Create an organizational development plan**

Some organizations move only a piece of their analytics to the cloud at a time. For example, a marketing department might embrace cloud analytics to take advantage of the latest visualization tools. It's all good—until other parts of the organization want to follow. Without an overall strategy for cloud analytics, a piecemeal approach can become complex and costly very quickly—with overlapping tools and functions and different vendors with different pricing models.

An organizational development plan is essential to a successful cloud deployment. Most organizations migrating to the cloud in the BI space straddle on-premise and off-premise environments—both in terms of source data applications and the BI environment itself. By identifying existing skills and seeing the gaps that arise with future requirements, you can evaluate options to build, borrow or buy the talent you need.

**Consider new security issues**

Handling security in a cloud BI environment can be a significant challenge—not because it's difficult and risky, but mostly because it's new. Companies often lack a robust security model for cloud vendors, including a defined security reference architecture. The data transmitted is often highly sensitive and subject to compliance with such regulations as HIPAA, HITECH, PCI DSS, GLBA, SOC 2, and GDPR. Ask your security team what requirements and expectations they would have for cloud vendors.

**Plan for a new type of vendor relationship**

Vendor relationships and engagement models will change significantly if you move to the cloud. What are users’ SLA expectations, and how will the vendor meet them? How will support organizations and processes need to change? What can the vendor take on, and what should you expect in terms of incident resolution?

**The Bottom Line**

Cloud analytics can empower your organization to rethink what's possible and build entirely new capabilities in a cost-effective way. But making the move is not a slam-dunk decision. In order to arrive at the right conclusion, you need solid criteria, thoughtful design and a good understanding of the key differences among the various solutions available to you. Then your decision will be clear, and so will your path forward.