



Insights to Achieve Visibility without Borders for Better Application Performance

Data Gleaned from Recently Published Research from:
MIT-Sloan Management Review



A key indicator of the success of digital transformation is the better, faster use of data to improve internal operations and protect customer relationships. What can we learn from businesses who feel they're already gaining significant competitive advantage from data analytics relative to others in their industries?

First, let us consider the goals that digital businesses set when tackling data and analytics initiatives. MIT Sloan Management Review surveyed 309 respondents in North America in October, 2018, where 80% of respondents identified as being in IT management, with the remainder identified as data analytics leaders or C-suite executives with significant responsibility for big data and analytics strategies.

Respondents of this survey revealed that, when optimizing and securing business operations, the top goals for data analytics are the following:

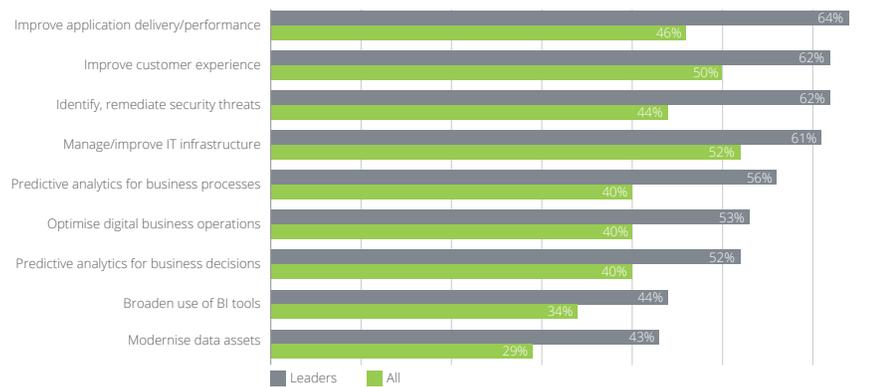
- Manage and improve performance of IT infrastructure
- Improve customer experience
- Improve application delivery and performance

It is not surprising that application performance is at the heart of these goals. In fact, the study indicated that, for leaders in their business, the two top goals for investing in better data analytics is improving application delivery and the customer experience:

“The greatest percentage of leaders (64%) cite improving application delivery and performance as a goal, while the goal of the highest percentage of all others (46%) is managing and improving performance of IT infrastructure.”

SMART FINDING

#1 Goal for Data / Analytics Leaders = Improving Application Delivery and Performance



Based on the MIT Sloan Management Review research, it is evident that infrastructure and application performance are central concerns.

Application stacks that traverse interconnected data centers, multiple Clouds, partner systems, and global networks challenge cloud architects and other IT stakeholders in collecting comprehensive, quality data and implementing effective application performance analytics.

The most recent RightScale 2018 State of the Cloud Report™ makes it clear that digital transformation includes the growing adoption of multiple, public clouds:

- 96 percent of respondents now use some form of cloud, while public cloud adoption increased from 89 percent to 92 percent in 2017.
- 81 percent of enterprises have a multi-cloud strategy.
- Among those using any public cloud, the average is 2.7 public clouds used.
- Many more enterprises (38 percent in 2018) see public cloud as their top priority, up from 29 percent in 2017.

Multiple public clouds combined with legacy, datacenter components make total visibility difficult. There are silos of relevant data, incompatible technologies, and cloud data integration problems – to name a few.

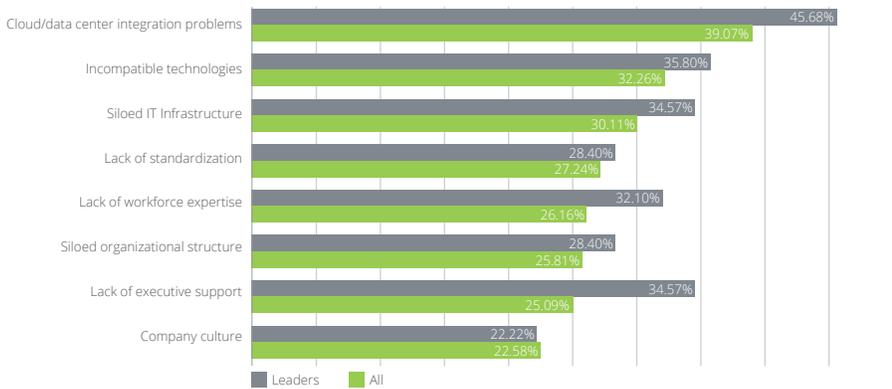
Large, increasingly complex, hybrid (public, private and legacy) IT systems, present significant challenges for IT teams tasked with discovering the root cause of a slowdown or degradation of service. The accumulating complexity of data, or more accurately, the challenge of winnowing precise, quality data for useful analysis, can lead to extended performance degradations, outages and costly mistakes in cloud resource allocation.

IT needs visibility across a growing landscape of interconnected datacenters, clouds, partner systems, and global networks in real time. Empowering IT to react to performance problems and security threats faster and decisively has become top of mind for cloud architects. Cloud architects need to think beyond technical and operational boundaries. They must design for agility, continuous roll-outs and migrating a/or scaling applications to meet changing business demands.

Speaking of the cloud, what did leaders in data and analytics initiatives generally say about the cloud and visibility? When asked about inherent challenges in achieving a single view of data, cloud and datacenter integration problems emerged as a significant problem.

SMART FINDING

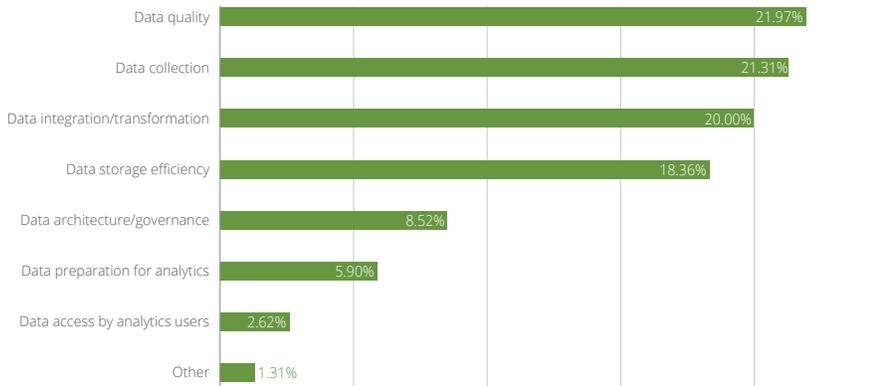
#1 Challenge When Achieving Single View of Data = Cloud / Datacenter Integration Problems



Significantly, leaders in business also feel strongly about the importance of high quality data in achieving their business goals:

SMART FINDING

#1 Priority when Leaders Advance Data and Analytics = Data Quality



Understandably, the quality and the comprehensive nature of application data plays a significant role in architecting networks for optimal application performance. But attaining this quality in the midst of digital transformation – and achieving complete visibility on application data – is an increasing challenge.

Summary

Application delivery and performance optimization are vital objectives for leading organizations today and cloud / datacenter integration problems are seen to hinder overall data quality and comprehensive visibility. These challenges are driving organizations to search for streamlined ways of collecting and transforming data to solve complex application performance problems – before they compromise the customer experience.

One streamlined approach is to focus on the data that captures every action and transaction traversing the enterprise through traffic flows, otherwise known as wire or packet data. Wire data is THE way that applications communicate. Only wire data can provide complete and precise visibility on networks and applications; it is the only common element present in IT services. Ultimately, effective application performance data can only come from packets traversing the wire: the “single source of truth”.

Enterprises have the responsibility of ensuring business services are up, fast and secure. Transforming wire data to monitor IP communication provides cloud architects and IT OPS with the network, infrastructure, and application insights to manage effective digital transformation efforts. The important aspect is to ensure you can also maintain packet-level forensics with a federated architecture that can scale horizontally.

NETSCOUT’s vSTREAM™ software provides complete application visibility across hybrid clouds. Built on a foundation of packet/wire data analytics, NETSCOUT’s patented Adaptive Service Intelligence™ (ASI) technology and packet-derived Smart Data provides the complete yet streamlined information needed to assure application performance. Comprehensive and quality data distilled from the source allows cloud architects to analyze application service delivery throughout the modern IT landscape.

With visibility across the full scope of actual performance characteristics – how applications are in fact performing on production infrastructure, including public clouds – cloud architects and IT operations can:

- Optimize performance and increase the service assurance of critical digital services, whether on- or off-premises, in public or private cloud
- Solve problems rapidly with more complete visibility into East-West as well as North-South traffic
- Reduce MTTR of application components, including those residing or dependent on public cloud
- Realize proactive monitoring and deployment readiness before, during and after migrating applications to the cloud

Business leaders unmistakably see the benefits in optimized application delivery and performance. They understand the value of quality data to improve internal operations and customer relationships. Cloud architects leveraging Smart Data visibility across public clouds can accelerate the digital transformation of their business, better assure application performance and help improve customer relationships.

LEARN MORE

For more information on NETSCOUT® vSTREAM in Hybrid Cloud Environments please visit:

<https://www.netscout.com/product/vstream>



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