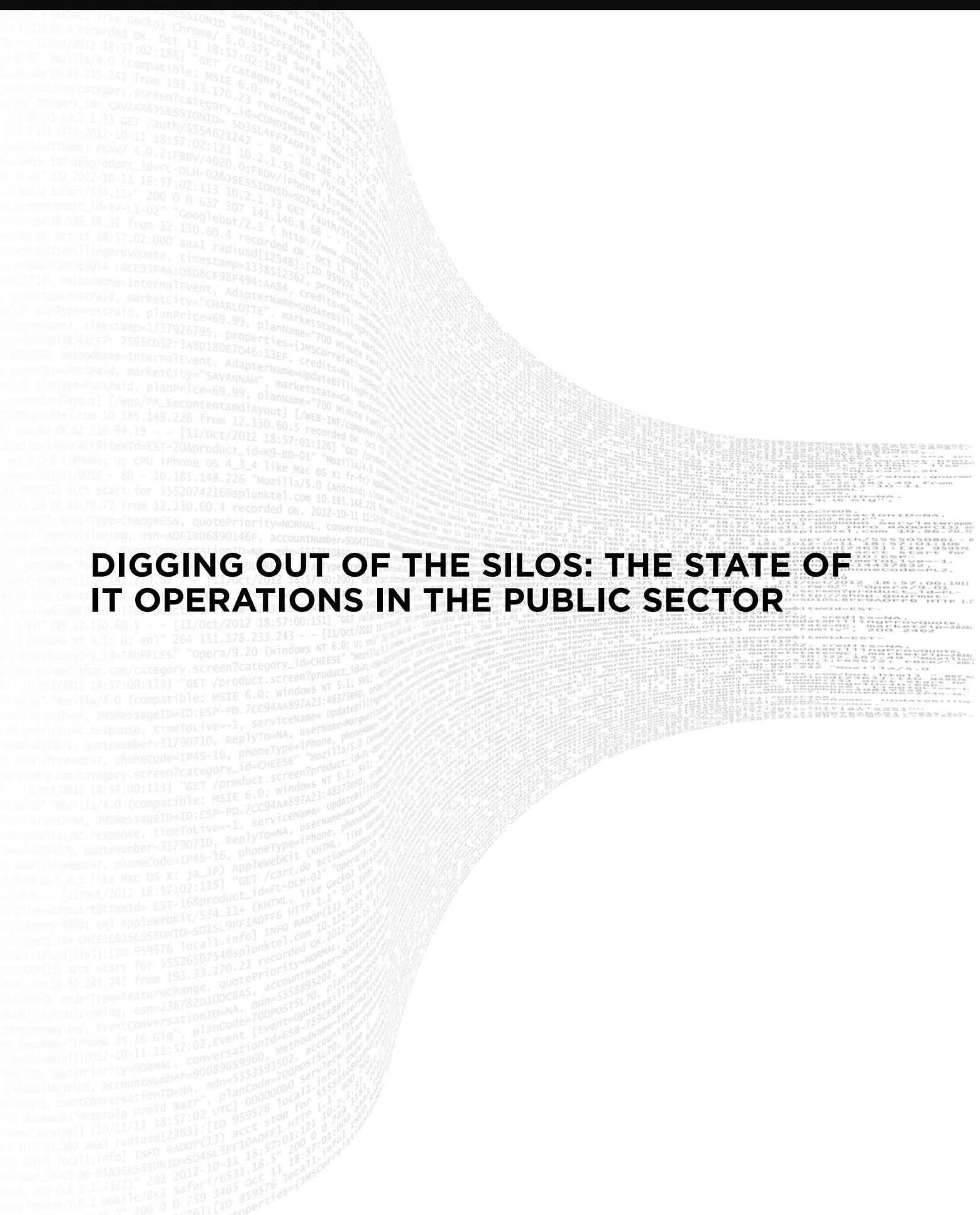


DIGGING OUT OF THE SILOS: THE STATE OF IT OPERATIONS IN THE PUBLIC SECTOR



Public sector organizations are in the middle of a digital transformation. They are looking to transform their organizations to meet citizen demands, respond to the increasing difficulty of protecting legacy applications and data from sophisticated cyberthreats, and they also want to benefit from efficiencies promised by newer technologies.

This transition has already started with budgets shifting from traditional on premises investments to more cloud solutions and agile development models.

But unfortunately there are pains associated with this IT transformation. The evidence is clear from [a recent survey](#) conducted by the Ponemon Institute, and sponsored by Splunk, of 1,227 decision makers and operations staff across federal, state and local governments, higher education and federal systems integrators and aerospace and defense industries.

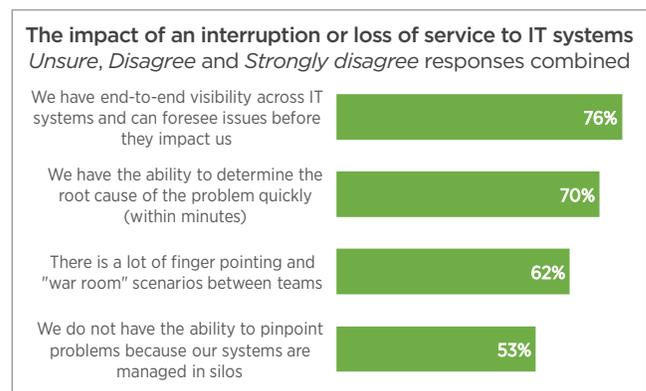
The survey shows that while shifts, such as the adoption of DevOps, is being embraced in some areas, digital transformation has led to an overall loss of confidence among public sector organizations. Specifically, public sector organizations are struggling with a lack of end-to-end visibility, siloed IT systems and technologies, and migrating workloads to the cloud.

This challenges public sector organizations to deliver services, comply with service level agreements (SLAs), meet citizen expectations and achieve organizational missions.

Driving Digital Transformation in the Public Sector

Digital transformation has become a key mandate in many organizations, partly because public sector organizations are realizing that maintaining legacy systems is expensive. In fact, 75 percent of federal IT budgets are spent on maintaining legacy systems. This prompted Congress to recently pass the [Modernizing Government Technology Act of 2017 \(MGT\)](#). The MGT Act is enabling the public sector to embrace the digital transformation and look at new technologies.

This shift is increasing the biggest risk to managing IT operations: a lack of real-time, end-to-end visibility into systems and operations. Public sector agencies are dispersed and their technology procurement needs historically have been driven by the needs of individual departments or mission goals. This results in a heterogeneous landfill of components and products that are intertwined when it comes to delivering any mission-critical service. But they lack to deliver a cogent view from a monitoring and troubleshooting perspective.



This makes it hard to pinpoint the cause of outages and the lack of integration between systems forces IT personnel to follow manual, ad-hoc processes. These also cost public sector organizations money because maintaining legacy tools and adapting these systems to newer technologies expensive and difficult.

The Ponemon survey highlights the fact that the average system recovery after an outage can take an average of 44 hours and upwards of 12 full-time resources. There is also the added cost of lost resources in terms of employees being pulled away from mission-critical projects.

Operating in Silos

The survey found that 53 percent of public sector IT professionals said they cannot, or were unsure, if they could pinpoint problems because their systems were managed in silos. This inability to pinpoint outages, or respond in a timely manner, directly impacts the average time required to troubleshoot and repair failed equipment, and the ability of IT managers to deliver on their SLAs and meet citizen and mission expectations.

The public sector is looking to data and monitoring tools to help them get ahead. And despite investments in these technologies, a siloed mentality has many of these organizations focusing on monitoring tools that are technology or application specific.

These tools are often adopted by different teams, and little effort is made to integrate the data and processes handled. Monitoring tools are also often alert-driven, which means IT teams are being buried with alerts, many of which are false positives. Without analytics capabilities, IT Operations teams become overwhelmed with alerts.

IT personnel are furthered challenged by the diversity of data from different systems and the lack of context to understand the bigger picture that data offers. In the Ponemon survey, 77 percent of respondents said analytics tools in place today either did not give them, or they were unsure, if it gave them contextual visibility to quickly pinpoint issues to determine the root cause of problems. That's because these solutions:

- Are unable to handle any and all kinds of data and formats
- Are brittle and make it difficult to maintain integrations that often don't communicate well with each other
- Can't scale due to big data volumes, which results in aggregated and pre-normalized data
- Require untenable deployments—often taking months or years to deliver value

Navigating Through Event Storms

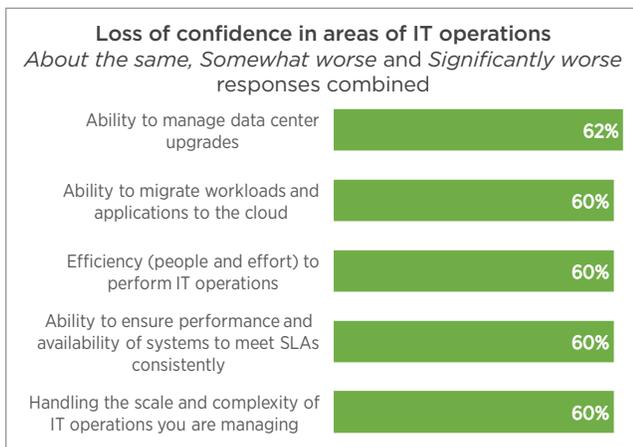
When there's a lot of data and no knowledge, it's difficult to act on anything. Every IT organization's No. 1 goal is to deliver reliable services and meet SLAs. Finding and fixing problems quickly, and with the right priority, is business critical when an outage happens.

While event management solutions trigger on events, they don't provide context or prioritization capabilities. The issues identified can be better handled by event analytics, which is the automated process of correlating alerts in the context of the service or organization in question, reducing time-to-insights so IT staff can respond to outages faster and even foresee issues and avert them before they impact the organization. With event analytics, agencies can identify patterns and insights, in many cases, that they were not aware of, which can lead to resolving issues in near real time and even get ahead of them.

Cloudy With a Lack of Confidence

The Ponemon survey showed that the public sector is planning to spend significantly on migrating to the cloud. About half of the respondents said that spending on cloud operations will grow over the next year. Contrast that to only 29 percent of those surveyed saying that they planned to spend on on-premises solutions during the same time.

But the shift to the cloud has brought stormy weather to the public sector. The survey found that most organizations surveyed experienced a loss of confidence in the ability to migrate workloads and applications to the cloud.



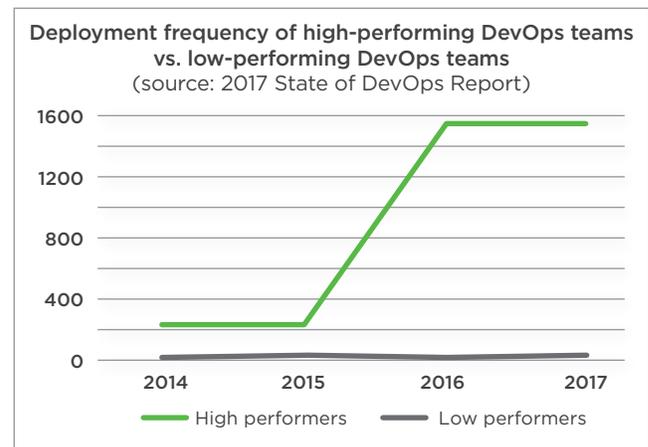
Further, 62 percent of public sector IT professionals said their confidence in the ability to manage data center upgrades has not improved. Instead, it has gotten worse or stayed the same.

Good News: DevOps Provides a Better Way to Digitally Transform

There are still signs that the public sector is embracing the digital transformation despite all the challenges. A primary example is DevOps, which is enjoying widespread adoption in the public sector. Seventy-eight percent of survey respondents say their organization has either adopted or is planning to adopt DevOps

practices. And it's not just for side projects, with 74 percent of organizations planning to apply DevOps tools and processes to their mission-critical systems.

And for good reason too. According to [the 2017 State of DevOps Report](#), high-performing DevOps teams deploy 46x faster (Figure 1), enjoy 440x faster lead time for changes, recover on average 96x faster, and suffer 5x fewer change failures. These organizations are also more than twice as likely to benefit from higher quality and quantity of products and services, better operating efficiency and higher customer satisfaction.



Using Splunk to Bridge the Silos and Enable DevOps

The Splunk software is a powerful and scalable data analytics platform that collects and correlates any data from any source in any format and delivers real-time end-to-end contextual visibility. This is delivered through one single interface, so IT personnel can discover patterns and insights, some that are not easily apparent, to solve a variety of IT challenges.

The Splunk platform also automates data collection and uses machine-learning capabilities to simplify operations, prioritize issue resolution and provide visibility into critical services.

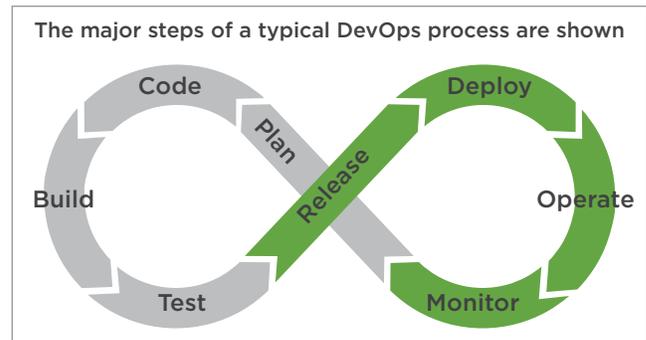
Splunk software also delivers holistic visibility across hybrid, on-premises and cloud environments—enabling public sector organizations to migrate to the cloud at their own pace. It provides granular visibility into migrations during the process and can help monitor availability and performance of applications after migration is complete. This is particularly important given the Ponemon survey finding that a decline in confidence among public sector IT professionals was, in part, because of their inability to manage data center upgrades and move workloads to the cloud.

Two of the biggest concerns that survey respondents pointed out with cloud migrations were the inability to monitor and troubleshoot applications and lack of visibility across workloads.

The Splunk platform specifically helps IT teams gain visibility into the performance, availability and usage of their systems and applications. This leads to less downtime, the ability to solve problems faster, and operations that run smoother and more efficiently.

Spanning the Development Lifecycle

Additionally, Splunk software empowers teams to adopt high-performing DevOps practices and processes.



The platform empowers teams to quickly move from concept to production to improve the velocity, quality and business impact of application delivery. The Splunk platform also helps:

- Deliver end-to-end visibility across every DevOps tool chain component
- Use objective metrics to ensure code is operational and meets quality SLAs
- Correlate business metrics with code changes to gain new business insights

IT Modernization is a clear and current priority and evidence shows agencies are ready for the transformation. Splunk can help them overcome the most important challenges by providing the visibility and fidelity needed to confidently navigate this journey.

YOUR NEXT STEPS

Want to learn more about how public sector organizations in the U.S. and the U.K. are feeling about the digital transformation? [Download the full Splunk-sponsored research reports](#) conducted by the Ponemon Institute or [contact a sales representative](#).