

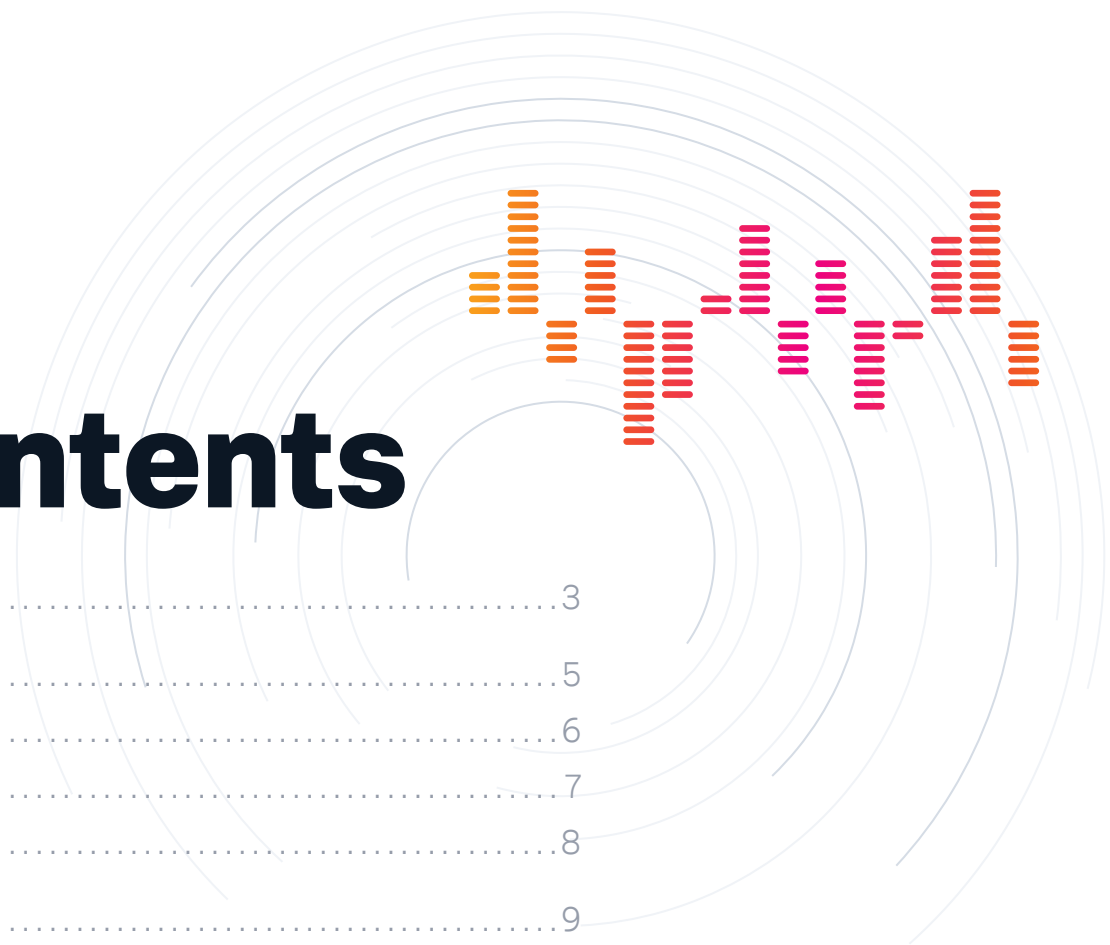


Modernizing the Mission

How forward-thinking public organizations
are transforming to better serve citizens

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A World on the Move

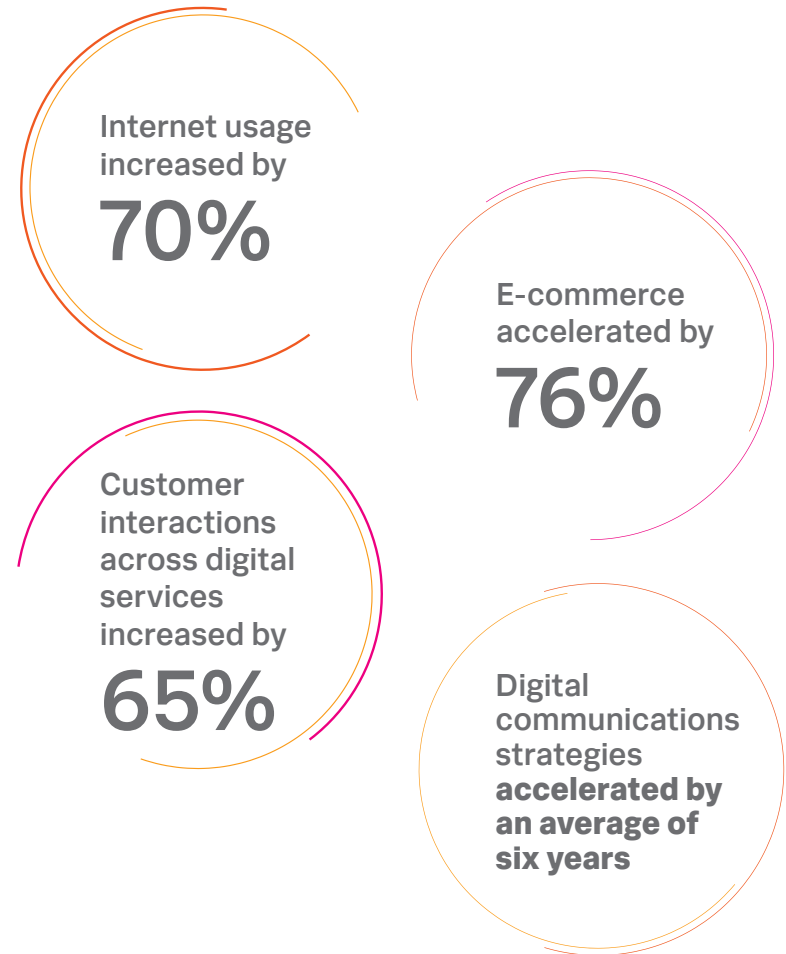
2021 is a new era for data in government. Technological change is advancing at record speed. Citizens' expectations for seamless digital experiences are rising. Cloud technologies are both increasingly vital and complex. And COVID-19 threw it all into overdrive.

In 10 months, we experienced more technological change than in the past 10 years.

The COVID-19 pandemic and its subsequent global shutdowns made many government services more critical than ever while also challenging organizations' ability to deliver those services. Around the world, public agencies had to accelerate digital transformation to continue delivering on their missions in a time of disruptive crisis — all while being expected to deliver digital services on par with those from private companies.

The pandemic was a real-world proof of concept that cloud and other modernization strategies are now a mission-critical priority. Today, nearly every interaction between citizens, government employees and agencies includes at least one digital system, whether it's registering a vehicle, receiving a health test, filing for veteran or retirement benefits, or processing a student loan.

In 2020:



FOREWORD

Government leaders now realize they need to continue to fundamentally transform how they operate and transact — both internally and with the citizens they serve — to better deliver on their missions in a more digital post-pandemic world.

The catalyst for transformation

How can schools, governments, hospitals and nearly every organization ensure that these critical systems remain operational, secure and ready for what's next?

The answer is simple: They unleash the power of their data.

Now more than ever, data is a strategic asset, a catalyst in the digital and cloud transformations that many organizations are still undergoing. Data can ensure constituent satisfaction at speed, launch modernization initiatives and deliver critical mission outcomes — and savvy public sector leaders are already harnessing this potential.

With the help of the Splunk® Data-to-Everything™ Platform, public sector organizations are empowering their workforce while fulfilling their critical missions, from serving justice more swiftly throughout court systems to ensuring safety for students and staff in higher education.

In these pages, you'll discover how public agencies are accelerating cloud transformation, bolstering cybersecurity and designing modern digital services to meet mission objectives and serve the public good. You'll see how organizations across regions — from a fire and rescue service in the UK to some of America's largest public universities — are using data to push the boundaries of what's possible to build more resilient organizations that stand the test of time and technology.

— **JULIANA VIDA**

Splunk's Group Vice President, Chief Strategy Advisor (Public Sector)
Former Deputy CIO for the U.S. Navy

Cybersecurity Breeds Resilience



To preserve public trust, government agencies must ensure their labyrinthine environments stay secure — and on the heels of 2020, that's only gotten harder.

The near-overnight move to remote work burdened existing IT systems with additional stress while opening the door for new threats. Cyber attacks are more prevalent and sophisticated than ever before. And agency IT environments are increasingly complex, consisting of legacy infrastructure and new technologies that span across disparate public clouds, private clouds and on-premises systems — none of which are designed to work seamlessly together.

In short: Security teams have a lot on their plate.

That's why modern public sector organizations rely on Splunk to stay resilient in the face of today's new threats and volatile market forces. By using the Data-to-Everything Platform to better understand and act on their data, these organizations are fortifying and modernizing their security defenses while enhancing efficiency and building business agility for mission-critical outcomes.

Derbyshire Fire & Rescue Saves Money and Lives by Maximizing Data

Key Challenges

Without a centralized log monitoring solution, the service's small IT team had poor visibility across system management, software updates and security threats.

Key Results

With Splunk, the IT team improved security response and reduced cyber risk with better insights into the service's security posture, faster troubleshooting and enhanced collaboration.

Derbyshire Fire and Rescue Service (DFRS) is tasked with protecting more than a million people. Yet to deliver safety for citizens, the service must first ensure security for its 31 fire stations and two data centers, which were at risk of cyberattacks. With Splunk's dashboards, the busy, hard-working DFRS team has an easy-to-access visual overview of system health. Previously, security incidents may have gone unnoticed, with engineers having to manually trawl through log files to look for anomalies when something suspicious was identified. With Splunk, DFRS has improved worker productivity while also avoiding security disasters by blocking intrusions before any damage occurred.

[Read the full case study](#)



Thanks to Splunk, we get vital information at a glance. It's helped us make better, more informed decisions.”

— Pete Garyga, ICT Security and Project Team Manager, Derbyshire Fire and Rescue Service

Data-Driven Outcomes

Blocked security intrusion before damage occurred

Quickly spotted and **repaired system maintenance issues**

Saved money by tracking and addressing printer misuse





Sandia National Labs Detects and Counters Supply Chain Attacks With the HECATE Platform

Key Challenges

With more than 200 reported software supply chain attacks over the last 10 years, Sandia National Laboratories set out to create an analysis platform that could help organizations reduce risks when installing new software.

Key Results

To proactively curb supply chain subversions, Sandia developed the HECATE platform, which employs Splunk to help automate the identification of supply chain risks and investigate suspect behaviors before there's a breach.

Rather than attacking an organization directly, software supply chain attacks target the vendors of apps and other software used by an organization. To help organizations identify and counter these attacks, Sandia National Laboratories developed the HECATE platform, which sits on Splunk technology. Creating an immersive environment to install, execute and observe software, this one-of-a-kind analysis solution automatically identifies software supply chain risks through everything from static and dynamic analysis to scalability and automation. By checking and cleansing software for breaches or intrusions before it's installed, HECATE helps leaders across industry, government and academia verify trust and reduce the risks that come with installing commercial and open-source software in their networks.



Our adversaries have weaponized compliance and fundamentally broken the trust relationships in software. New tools and techniques are needed to evaluate software before entering our networks.”

— Vince Urias and Will Stout, Research & Development, Sandia National Laboratories

Data-Driven Outcomes

Provided ability to **automatically scan patch updates** prior to production

Gave organizations a **consistent method to uncover software subversion** through supply chain risk management, source code analysis and open-source intelligence

Reduced time of **analysis from days to minutes**

The University of Arizona Innovates to Meet the Challenge of the Pandemic

Key Challenges

When nearly all of its 60,000 students, faculty and staff quickly moved off-campus, the University of Arizona (UArizona) turned to Splunk® Remote Work Insights (RWI) to understand and mitigate new challenges.

Key Results

With Splunk RWI, the university gained visibility into its network and insights into whether people were making use of remote-work tools, allowing the school to continue its mission even while fully remote.

Following the COVID-19 outbreak, UArizona had to quickly transition to remote teaching, learning and work with only two weeks' notice. The Information Security Office had no way to see service usage and determine if students were able to work effectively. And as network traffic patterns moved outside the firewall, the number of people suddenly using unsecured connections surged.

By using the Splunk platform to see data from disparate systems and networks in one place, UArizona regained lost insight into the student experience — while saving time for the already overloaded IT team. To safely bring students and staff back to campus, the university is using data to monitor foot traffic and student behavior while anonymizing data to protect student privacy.

[Read the full case study](#)

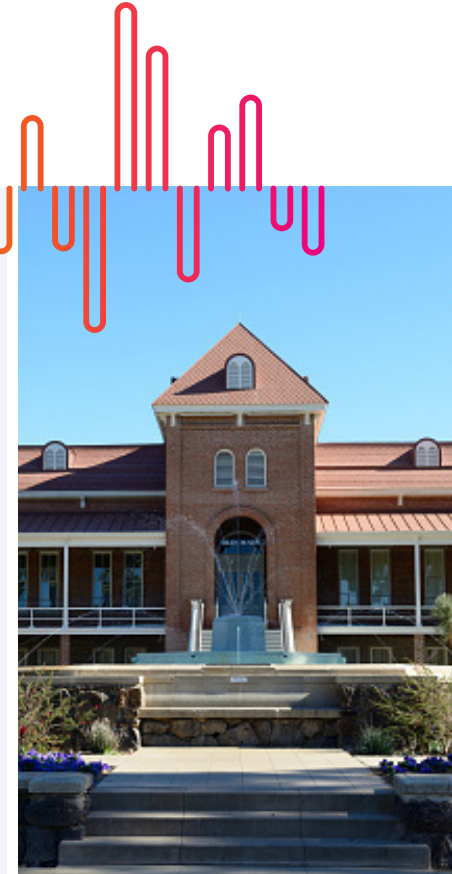
[Watch the video](#)

Data-Driven Outcomes

Unified data from the school's VPN, SSO and MFA systems, wireless network usage and Zoom traffic for **better security and performance**

Enabled the team to make decisions and **take action based on actual data** instead of assumption

Improved efficiency and security while gaining new sources of data and insights to inform decision-making for IT, network planning and marketing



Splunk has been invaluable to us. We're able to move forward with innovative practices around using machine data that we collect, like wireless access points to inform leadership about the density in various areas of campus."

— Lanita Collette, Deputy Chief Information Officer and Chief Information Security Officer, University of Arizona



Digital Experiences Worth Remembering

Citizens increasingly expect — and deserve — exceptional user experiences.

Yet “exceptional user experience” is a moving target, thanks to constantly improved consumer devices and applications that lead to steadily climbing expectations. Today, even a split-second stall or performance glitch can cause a user to abandon an organization’s website or app.

To keep innovating and building new digital experiences, public agencies must ensure resiliency, scalability and uptime — all while proactively spotting potential gaps and opportunities to improve.

With so much to accomplish, visionary public agencies are relying on rich insights from the Splunk platform to ensure services are timely and meet citizen needs. Armed with real-time data, these organizations can map and monitor their interwoven systems to visualize business processes, reduce complexity and pinpoint performance issues long before they turn into failure. By improving efficiency, teams are able to invest their time in building new, forward-thinking digital services and experiences that serve, engage and delight citizens.

Solutions

IT Operations
Security

Dutch Court System Rules in Favor of Real-Time Data

Key Challenges

Without insight into real-time data and performance metrics, the Judiciary of the Netherlands couldn't effectively meet business needs for support, information and performance metrics.

Key Results

Thanks to greater operational visibility and live analytics, the Dutch Court System delivers useful insights, more uptime and faster response times to critical events.

De Rechtspraak, the Dutch judiciary, needed a reliable and responsive IT service to handle over a million cases per year that pass through 11 district courts, four courts of appeal and one Supreme Court. With Splunk, the judiciary understands how courts are functioning in real time, gaining insight into real-time performance and availability while anticipating and preventing outages that might leave case documents unavailable. When an outage does occur, teams now fix the underlying problems in hours, not days.

Since adopting Splunk, De Rechtspraak's IT teams play an integral role in planning for the organization's future, equipping the rest of the business with vital metrics — such as how people use the website — to determine which services and technologies should be upgraded for a better experience.

[Read the full case study](#)



We don't view IT as IT anymore; it's so integral to business. It's not even a business partner. IT is business.”

— Erik Boerma, Senior Judge, De Rechtspraak

Data-Driven Outcomes

300 unique users using more than 500 unique dashboards, including those that measure progress toward business goals and help secure funding

92% more people have access to vital business metrics and insights

80% more insight into IT components

50% less time spent on resolving issues or outages

90% less noise on machine data metrics





Data-Driven Outcomes

100% of companies use the DSN in France

2.7M digital reports per month

28M digital reports processed in 2019



We've moved from simple data collection to advanced insights, helping us extract concrete value from our data and ensuring the success of various public service missions.”

— Youssef Kilany, Head of Architecture, Expertise & Performance Department, GIP-MDS

GIP-MDS Gets a Unified Data Platform for a Big Data World

Key Challenges

To fulfill its mission to facilitate the collection of social data, France's GIP-MDS needed to better manage and deliver data within its distributed systems to investigate and resolve incidents faster.

Key Results

With proactive analytics and actionable data insights, GIP-MDS has moved from a reactive to proactive IT environment while slashing incident detection time for a unified declaration process across various social welfare organizations.

A collaboration between public and private sectors, Groupement d'Intérêt Public Modernisation des Déclarations Sociales (GIP-MDS) was created to digitize social reports. Its massive digital transformation project, the Déclaration Sociale Nominative (DSN), replaced 47 processes with a single digital document, helping private — and soon, public — organizations across France.

But with more than 2 million DSN reports submitted each month for more than 20 million employees, GIP-MDS had a lot of data to monitor and deliver. The organization needed Splunk to ingest and process its large volumes of unstructured data, regardless of which format each public agency used. Since lost or delayed reports waste time and money, the secure, compliant and timely reporting made possible through Splunk has helped reporters and operators increase efficiency, protect employees' rights and free time for other priorities.

[Read the full case study](#)



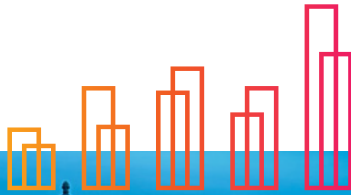
The Cloud Is Now

Moving to the cloud is a business imperative today. While public organizations have been slower to embrace cloud transformation than the private sector, a growing number of government agencies and educational institutions are shifting to a cloud-first strategy to enable new operating models, become more agile and fuel mission success.

But the resulting multicloud and hybrid landscape can lead to immense operational complexity — and failing to manage it threatens failure for any organization's modernization projects.

To thrive in this more complex environment, organizations must ensure that critical business systems are highly performant while also controlling costs as resource needs surge. They must boost security to protect the flow of information across a greater attack surface. And they need to adopt cloud-native technologies and practices to quicken the rate of innovation.

Public agencies undergoing the most successful transformations are tapping into a valuable resource: real-time data. These organizations are using the data they generate and collect to help manage systems, build better applications and create a more secure environment. They're bringing data to every question, decision and action to accelerate their cloud transformation and better deliver on their mission.



We were able to shift from a reactive to proactive approach to testing. In this emergency situation, Splunk became the tool we relied on to automatically get out information quickly, whether it was sending testing data or alerts.”

— Nick Vance, Manager of Data and Technology Innovation, University of Illinois

Splunk Cloud Helps **University of Illinois Urbana-Champaign** Protect Students and Faculty From COVID-19

Key Challenges

To ensure safety for students and staff as it restored in-person learning, the University of Illinois Urbana-Champaign (Illinois) needed a way to scale testing and decrease virus transmission.

Key Results

With Splunk® Cloud, Illinois has safely brought students and staff back to campus, administering and tracking results of more than 100,000 weekly COVID-19 tests while contact tracing to help further curb spread of the virus.

With Splunk, Illinois has developed a public testing data dashboard that helps keep students and faculty informed of the latest COVID-19 testing and case rates. Since releasing the dashboard in July 2020, Illinois has conducted over 1.5 million tests across campus to date. The university also launched a mass testing regimen and the Safer Illinois app, a central hub where students can easily report symptoms and receive exposure notifications on their devices. By using Splunk to quickly turn data into action, Illinois has seen a sharp drop-off in COVID-19 cases (less than one percent) — even during times when case numbers spiked across Illinois.

[Read the blog post](#)

[Read the full case study](#)

Data-Driven Outcomes

Decreased virus transmission by using real-time data to immediately notify students who tested positive

Slashed COVID-19 cases to less than one percent by scaling proactive testing

Lowered costs while expanding impact by transitioning to Splunk Cloud

The **U.S. Census Bureau** Goes Digital for the Largest Civilian Count in U.S. History

Key Challenges

To distribute more than \$675 billion in funding, the U.S. Census Bureau must get a complete, accurate count of every person living in the United States during its 2020 census, the country's first digital census.

Key Results

The Census Bureau is using Splunk to accelerate its cloud transformation, protect data, consolidate systems, reduce manual door-to-door efforts and bring data to every decision for the largest civilian count in U.S. history.

Every 10 years since 1790, the U.S. Census Bureau has set out to accomplish the country's largest civilian undertaking: getting an accurate count of each person living in the United States and its territories. As the country's first digital decennial census, the 2020 census provided Americans with the option to respond online, in addition to by phone or mail.

To support its extensive operations, cloud migration and new digital options, the Bureau relies on Splunk to monitor and optimize its complex environment. Splunk's data visualizations are a critical part of daily workflows, delivering real-time insights to inform how senior leadership and teams like security, IT and application approach questions, make decisions and take action. With Splunk at the center of its SOC and NOC, the Census Bureau has improved uptime and advanced its cloud transformation while proactively identifying vulnerabilities and troubleshooting issues faster.

[Read the full case study](#)



We have so many components, from servers in the cloud to devices in the field. For us to monitor every component — whether network, database or middleware — in an automated way, we have to rely on Splunk. The Splunk platform gives us visibility into all our operational aspects.”

— Atri Kalluri, Senior Advocate, Decennial Census Response Security and Data Integrity, U.S. Census Bureau



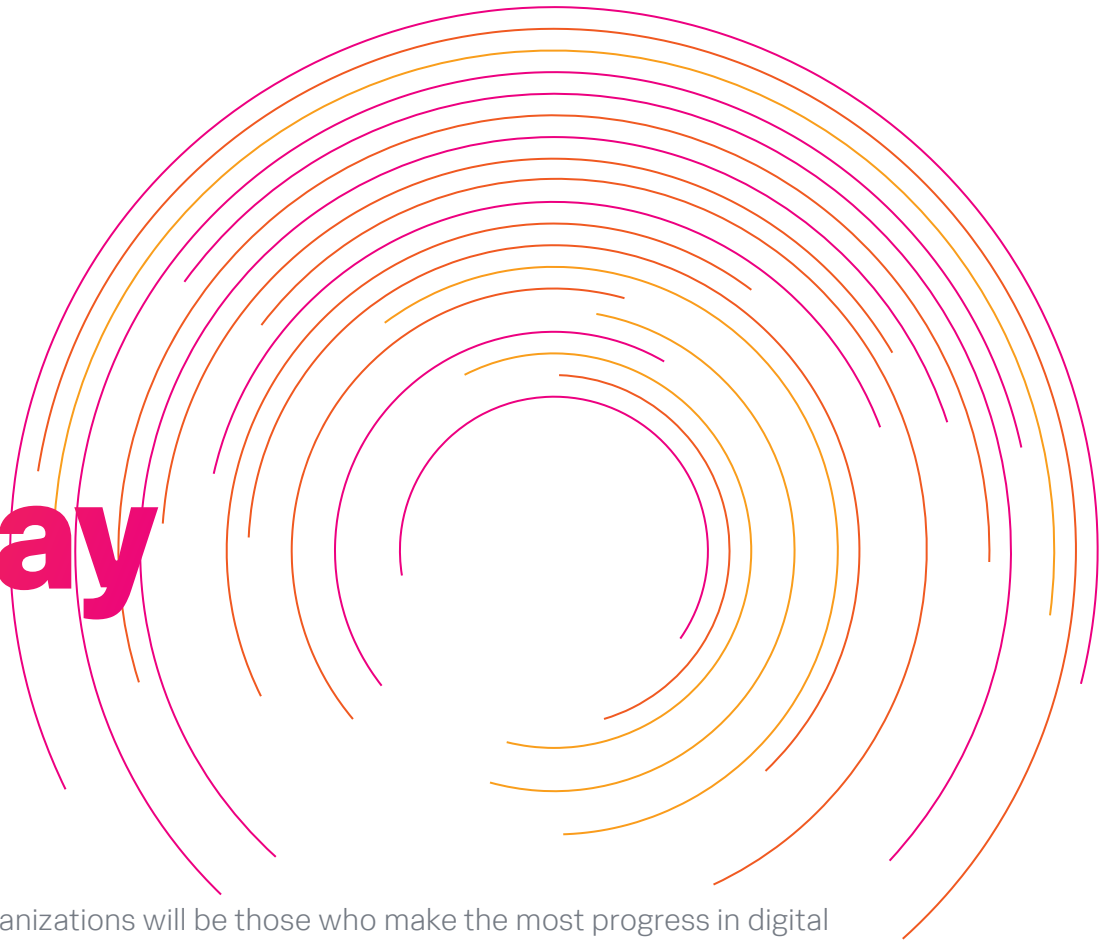
Data-Driven Outcomes

Facilitated success for the 2020 census, the country's **first digital decennial census**

Enabled executives to make **better, more informed decisions** through standardized dashboards and real-time insights

Ensured integrity, availability and security compliance for the bureau's complex infrastructure of **52 systems** and **35 operations**

The Only Way Forward



In 2021 and beyond, the most successful public sector organizations will be those who make the most progress in digital transformation. As public sector agencies turn to new technologies and paradigms to further their digital journeys, one thing remains constant: the necessity of real-time data.

By relying on the Splunk platform to bring data to every question, decision and action, leaders in government and education are better serving citizens and delivering on their missions. They're remaining resilient, accelerating their transformations and designing sublime citizen experiences. They're conquering complexity while proactively innovating for the future.

2021 is a new era for data in government. With Splunk, you'll be ready to seize the opportunity.

Discover how Splunk brings data to every mission across the public sector.

[Learn More](#)

