# Blueprints for **SUCCESS**

How forward-thinking organizations bring data to every action



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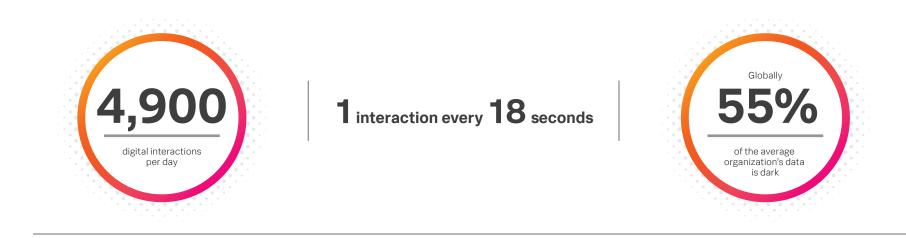
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# Bringing Data **to Everything**

From sprawling, interwoven infrastructures and far-flung armies of sensors to countless customer touchpoints, digital technologies create constant surges of data that offer unprecedented challenges and breathtaking opportunity.

All we have to do is keep up.

And it's a lot to keep up with: According to Network World, IDC predicts that by 2025, every connected person in the world (around 75% of the total estimated population) will engage in more than 4,900 digital interactions per day — about once every 18 seconds.



Each of these interactions is an opportunity. By maximizing the data created, businesses can gain valuable insight into user behavior, security threats and more. While many organizations are ingesting this new swell of data at unparalleled speeds, others aren't even seeing the complete picture; 55% of their data remains "dark" — unquantified, unused, unknown — according to the 2019 State of Dark Data research by TRUE Global Intelligence, sponsored by Splunk.

But some organizations have already uncovered the key to success, making smarter decisions and sharpening their competitive edge. Armed with Splunk, the Data-to-Everything Platform, the most forwardthinking organizations are bringing data to every action and outcome. They're taking a holistic approach to their data — from investigation and monitoring to analysis and action — rather than allowing essential insights to be lost in an unnavigable sea of data. They're realizing their full potential through more informed decisions, more comprehensive insights and a more empowered workforce.

These are the organizations of the future. Let's follow their blueprints.

# **A Data-First** Foundation



Amid the surge of data and technology, Splunk customers across industries from Nasdaq, FedEx and BMW to Lyft, ESPN and Coca-Cola — have found a way to scale their efforts and amplify their data's impact. Instead of investing countless hours into figuring out where their data is coming from, these organizations use Splunk to focus on where their data is going and how it can benefit the entire business. To give their data a voice, these organizations begin with a clear, real-time view of what's happening across the business. Through components of the Splunk platform, such as customizable dashboards, Splunk for DevOps, Business Flow and more, customers can correlate disparate observations from both structured and unstructured data sources, gaining clear visibility into all their systems.

By unifying infrastructure, application, sensor, network and business process data in a single place, organizations are democratizing their data. Now, technical and non-technical roles alike — from IT and security to DevOps and business teams — can examine data under multiple lenses to derive faster, more holistic insights across the enterprise. With the ability to not just investigate, but also monitor, analyze and act on this information, these forward-thinking organizations are transforming data into action and action into successful outcomes.

## Building **Success**

Whether battling the opioid epidemic, protecting students against fraud or bringing disaster relief to remote corners of the world, companies are using Splunk to leverage data in unique, unexpected ways — and helping change the world in the process.

Here are a few key areas where companies are expanding their approach to data to produce transformative outcomes.

#### Business Insights

Data delivers the best results when departments across the organization harness its power. "Organizations of the future" now make their rich data readily available to teams across the enterprise. Using data as a guide, organizations as varied as medical centers, nonprofits and manufacturers are using Splunk to make smarter decisions and achieve amazing things.

### NewYork-Presbyterian improves drug controls, patient care

One customer using data to achieve inspiring outcomes is NewYork-Presbyterian. As one of America's most comprehensive healthcare delivery systems, NewYork-Presbyterian approached Splunk to enhance patient privacy, centralize its data and add even more safeguards to its already robust set of policies, protocols and system controls.

But aggregating data from hundreds of clinical applications and systems was only the beginning. Consistently recognized as a leader in medical education, groundbreaking research and innovative clinical care, NewYork-Presbyterian is on the front lines of the opioid crisis ravaging the United States. With Splunk in place to monitor IT security operations, NewYork-Presbyterian recognized that the same principles could be used to develop a platform for better regulating controlled substances and other medications.

Enabling the institution to accomplish its strategic goals, the controlled substance monitoring platform will allow NewYork-Presbyterian to track data from electronic health records (EHRs), Electronic Prescription of Controlled Substances (EPCS) platforms, pharmacy dispensing systems and other sources, delivering insights to guard against the diversion of these medications. For example, the platform will immediately alert NewYork-Presbyterian if a physician prescribes a controlled substance to a patient not currently in the care of the hospital, or if a pharmacy technician uses an automated dispensary cabinet more often than his or her peers.

Equipped with Splunk's insights and monitoring capabilities, NewYork-Presbyterian "is on the forefront of using advanced technology to protect our patients and provide innovative, compassionate care," says Jennings Aske, NewYork-Presbyterian's senior vice president and chief information security officer.

NewYork-Presbyterian recognized that Splunk could be used to develop a platform for better regulating prescription medications.

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### Zeppelin manufactures deeper customer satisfaction

Just as NewYork-Presbyterian is using data in innovative ways, German company **Zeppelin** is becoming more proactive and efficient with the help of Splunk. A global leader in manufacturing, Zeppelin is best known for its machinery-focused innovations in engineering, construction, mining and energy. The German manufacturer initially deployed Splunk as a monitoring tool to provide insight into its complex IT infrastructure and growing services business, which relies on the ability to remotely monitor rental equipment. By using Splunk to analyze sensor data, Zeppelin was able to keep customers one step ahead of machine failure.

Given Zeppelin's improved monitoring quality and real-time visibility into numerous systems, expanding its Splunk use cases was a natural progression. Having worked closely with Splunk for nearly a decade, Zeppelin now sifts through volumes of generated data to gain meaningful business intelligence and develop digital solutions that improve customer satisfaction, save costs and achieve greater business efficiencies.

With Splunk Machine Learning Toolkit (MLTK), Zeppelin designed an anomaly detection model to predict future failures in spark plugs, the leading cause of power plant shutdowns. And the breakthroughs continue. Using Splunk IT Service Intelligence (ITSI), Zeppelin unearthed key performance metrics and business insights, including data on sales volumes, best-seller items, most productive sales reps and most active customers. "With Splunk, we have an innovative partner that helps us tackle the challenges with digitization," says Andreas Zientek, systems engineer at Zeppelin. "For us, this is the future."

### SONIFI listens to its customer data

Cost savings can be a clear indicator of smart strategic choices — and technology services company **SONIFI** perfectly illustrates the close relationship between business intelligence and cost efficiency. Supporting the hospitality and healthcare industries, SONIFI offers interactive television, streaming and internet to more than 1 million hotel rooms and 500 million people annually.

While data is vital to the company's strategy, SONIFI was spending too much time figuring out where its data was coming from. With large volumes of data in multiple places, the team had to first develop tables to structure raw data before being able to test and report on the data — a process that took weeks. After implementing Splunk, SONIFI can now ingest this same data without the need for tables or structure, slashing data query time from one day to one hour. These advances in efficiency and centralized reporting amount to \$85,000 in savings every year.

Now, the team uses Splunk to inform major decisions across the business from billing to customer experience. By leveraging Splunk technology to detect questionable cancellations and correlate customers' viewing habits with billing data, SONIFI now saves \$100,000 every month. And by using Splunk as a window into guest user behavior, SONIFI can provide valuable insights to their hotel partners, as well as identify what wording and graphics will drive greater usage and click-throughs.

"Data is important to SONIFI. We gather insights about how guests and patients are using our system," explains Kara Heermans, vice president of product management and user experience at SONIFI. "We then use the insights from this data to make better decisions about our products, and to provide information to our hotel or hospital partners about how to adjust the system to serve their customers' needs better." every year

\$**85K** 



every month

What SONIFI saves annually through improved data ingestion

What SONIFI saves monthly with a better view of its customer and billing data

### NetHope improves global crisis communication

**NetHope** is saving lives on a global stage. A consortium of nearly 60 leading global non-governmental organizations (NGOs), NetHope coordinates communications for disasters ranging from health crises (like the 2014 Ebola outbreak in West Africa) to sudden-onset emergencies (such as the Nepal earthquake of 2015). Comprised of members like the Red Cross and Doctors Without Borders, NetHope collectively delivers more than 60% of all annual non-governmental aid around the world.

"Our work is primarily focused on making sense of disasters faster to help our member NGOs more efficiently provide the services that let people put their lives back together," says John Crowley, director of information management and crisis informatics. Yet coordinating communications among a wide range of global relief organizations with diverse budgets, IT infrastructures and levels of participation would challenge a team several times the size of NetHope. Through Splunk for Good, Splunk provides technology that helps NetHope better understand its data and communicate valuable insights. "We've never had the infrastructure to run a network operations center for all our distributed networks," Crowley says. With Splunk's help, he can monitor and maintain those networks, giving the agencies that rely on them a better understanding of how they're being used.

"The process of building up analytics around the health of the networks and understanding usage and how we can actually engage in network planning as opposed to network maintenance — that's all new," he says. "Being able to communicate specifically the impact of this program in this place around our connectivity and network initiatives gives us leverage that, to my knowledge, no one else in this sector has."

With the enhanced intelligence that Splunk offers, the consortium and its NGOs can better understand how their efforts are helping people in need, enabling greater efficiency and proactive preparation anytime disaster strikes.

Splunk gives NetHope "leverage that, to my knowledge, no one else in this sector has."

- John Crowley, Director of Information Management and Crisis Informatics, NetHope

#### Security

A comprehensive security strategy can be the difference between an organization's continued success or costly disaster. By wielding the power of the Splunk platform, businesses are thinking beyond a simple SIEM — welcoming advanced technology that protects their networks, as well as their customers, employees and reputation.

#### ASU fights fraud, protects payroll

Few sectors demand more stringent security than education, where institutions like Arizona State University (ASU) are committed to providing a safe, efficient and inspirational environment for the next generation of achievers. As the largest educational institution in the United States, ASU helps set the standard for security in higher education across the globe. Guided by the mission to protect students and faculty against threats like fraud, ASU turned to Splunk to safeguard its systems. Through sophisticated alerts and monitoring, Splunk reduced payroll and direct deposit fraud for the more than 14,600 employees on ASU's \$889 million annual payroll, saving the university \$780,000 every year.

"Thanks to Splunk, we now have visibility into the student experience and can collect, aggregate and report on data to make business decisions faster than ever before."

- Nate Plamondon, Splunk Architect, Arizona State University

After witnessing how effectively Splunk elevated its security, ASU leveraged the platform for another crucial objective: improving the student and employee experience. By using Splunk to centralize key data across campus — Wi-Fi data, application data, network data, Amazon Echo data, class data, 911 call routing data and much more — the university gained visibility into the student experience across campus.

"With over 150,000 students, faculty and staff at ASU, we are constantly ingesting data from multiple different sources," says Nate Plamondon, ASU's Splunk architect. "Thanks to Splunk, we now have visibility into the student experience and can collect, aggregate and report on data to make business decisions faster than ever before."

This view of previously disparate systems enabled the university's distinct operational teams to address student problems quicker and enhance the entire student experience from orientation to graduation. By using the pervasiveness of campus data to its advantage, ASU can now automatically suggest the next set of classes to students at the end of each quarter, provide Wi-Fi in areas where students need it most, ensure student privacy, and resolve student issues faster by proactively identifying problems well in advance.

#### Aflac detects advanced threats early

Perhaps no organization understands the importance of protecting against disaster — security breach, accident, illness or otherwise — more than **Aflac**, the leading provider of voluntary insurance in the United States. After facing a surge in the volume and velocity of security threats, Aflac needed an analytics-driven approach to protect its customers and nearly 10,000 employees.

After a successful proof of concept for threat-hunting use cases, Aflac realized that the potential with Splunk was much greater than originally anticipated. "We were able to do extraordinary things in a very short period of time to detect advanced threats," says D.J. Goldsworthy, director of security operations and threat management at Aflac. "Ultimately, that was the decision point for us to make a much larger investment in Splunk Enterprise Security and Splunk UBA [User Behavior Analytics] across our different security use cases."



The results validated the team's decision. After a short, enterprise-ready implementation of just two weeks, the Splunk platform blocked more than 2 million security threats in six months. By eliminating manual data collection, the team saves more than 40 hours every month while automating threat hunting and bringing proactive threat intelligence to every corner of their city.

#### **REI gets an edge on security**

Approaching security as an opportunity to provide more value to its loyal customers, REI is known for exceptional customer service and brand reputation. When it migrated its applications to Amazon Web Services (AWS), the outdoor specialty retailer needed a comprehensive platform that could ensure utmost security and provide edge protection for its Amazon Virtual Private Clouds (VPCs).

Before turning to Splunk, REI lacked a solid investigation workflow that included REI's AWS deployment. This gap forced the technology team — about 400 people across security, application, core infrastructure and DevOps teams — to undergo a week-long process of logging into multiple accounts, aggregating data and analyzing spreadsheets. Further complicating its security system, REI lacked a safe path for migrating applications to AWS.

After a proof of concept, the team realized how valuable Splunk could be to security efforts. "We quickly demonstrated the standalone capabilities of Splunk, AWS Shield, and Amazon GuardDuty, but also the benefit of using Amazon GuardDuty in conjunction with Splunk for fast, insightful security intelligence," says David Bell, who manages infrastructure and cloud services at REI.

#### "Splunk Cloud has been a really good investment, not just for the capabilities it offers, but also for the time savings."

- David Bell, Manager, Infrastructure and Cloud Services, REI

With access to Splunk Cloud, the security, application, core infrastructure and DevOps teams now make analytics-driven decisions with enough context to minimize risk while ensuring availability for customers.

### **IT Operations**

Modern IT operations extend far beyond infrastructure and servers. Progressive organizations are using IT as a gateway to inform business decisions, inspire innovation and enhance the customer experience.

#### **Credit union invests in efficiency**

One innovator delivering on the vision to expand the scope of IT operations is credit union services organization **PSCU**. Enabling 900 credit unions to conduct 2 billion transactions every year, PSCU provides white-label applications for online bill payments, online lending and other financial services. To help credit unions better compete with banks, PSCU homed in on improving key IT performance metrics like mean time to acknowledge (MTTA), which conveys "I'm on it" when an alert is received. MTTA is a key metric for reducing downtime because it triggers incident response, thus lowering mean time to repair (MTTR).

To accomplish this goal, PSCU turned to the Splunk platform to enable seamless security monitoring and Payment Card Industry (PCI) compliance. PSCU solved its accountability challenges with Splunk VictorOps incident management software, which empowers on-call teams to find and fix problems faster with automated and insightful incident management routing, collaboration and reviews. Thanks to these new additions, the PSCU team lowered MTTA from four hours to under two minutes.

Seeing the firsthand impact of more accessible data and automated processes, PSCU extended VictorOps to Quality Assurance and DevOps, enabling the teams to proactively detect performance degradations before they turn into failures. By treating IT use cases as a mere starting point, PSCU now combines Splunk's machine data analytics with incident response from VictorOps to create an overarching platform of engagement, which helps DevOps teams innovate faster for greater agility and a better customer experience.



VictorOps cut mean time to acknowledge from four hours to under two minutes.

### Hyatt upgrades its customer experience and insights

Like PSCU, other modern organizations, such as **Hyatt Hotels Corporation**, are translating IT operations into strategic value by evaluating how their processes and infrastructure affect the customer experience. Aiming to provide guests a home away from home, Hyatt must provide a memorable experience at every stage of a guest's journey — from online booking to checkout.

To deliver on its mission "to care for people so they can be their best," Hyatt needed reliable IT operations, uninterrupted uptime and seamless application delivery for its 700 properties — and 700 corresponding servers — across more than 50 countries. Previously hindered by a time-consuming manual process for troubleshooting issues with online check-in, Hyatt turned to Splunk to centralize its data, capture and analyze business trends, and ultimately make the check-in process more reliable and enjoyable for guests.

When Hyatt implemented Splunk, the results were immediate — from lower MTTR and real-time system visibility to happier, more productive developers. With such compelling results, the Hyatt team broadened its use of Splunk Enterprise and the Machine Learning Toolkit to begin mining business data, expanding access from 12 people to more than 100 daily users.

Similar to Zeppelin and SONIFI, Hyatt now uses the Splunk platform to solve business challenges, identify strategic opportunities and offer a more modern experience to guests across the globe. Next on Hyatt's agenda will be using Splunk's predictive analytics to provide further insight into hotel room occupancy and beyond, bringing data to more decisions and enabling further success.

## EU retailer uses data to understand global complexity

Without a data platform, organizations have difficulty gaining clear insights from current systems and business processes — a challenge that **Otto Group** experienced firsthand before Splunk. Comprised of businesses like OTTO, Germany's largest online retailer of fashion and lifestyle products, Otto Group had an array of siloes and business processes spanning more than 120 companies across 20 countries. Already a Splunk Enterprise customer for more than a decade, Otto Group decided to bring its data-first approach to every part of the business and deployed Splunk Business Flow as a process mining tool to better understand its systems.

"The first thing we found was that our internal systems are way more complicated than we ever had imagined," says Andre Pietsch, product manager at Otto Group.

#### Splunk Business Flow "is like you're using an X-ray machine into your software."

- Andre Pietsch, Product Manager, Otto Group

Now with a vivid understanding of how processes work together, Otto Group can use dynamic event stitching to link disparate data sources, quickly detect anomalies and gain actionable insights for a wide variety of stakeholders across the business. By democratizing data across the organization, Otto Group has achieved powerful outcomes, including more collaboration among departments and less time from initial customer interaction to order fulfillment.

"We can follow anything with Business Flow, not only from a technical point of view," Pietsch says. "For the first time, business people can analyze the business payload in between the technical information."



To stay competitive in this evolving, tech-centric world, organizations must leverage their data's full potential to make smarter, faster decisions and gain visibility into previously dark corners of the business. When leaders in every department are empowered to investigate, monitor, analyze and act on their data in real time, they bring insight to every decision and action.

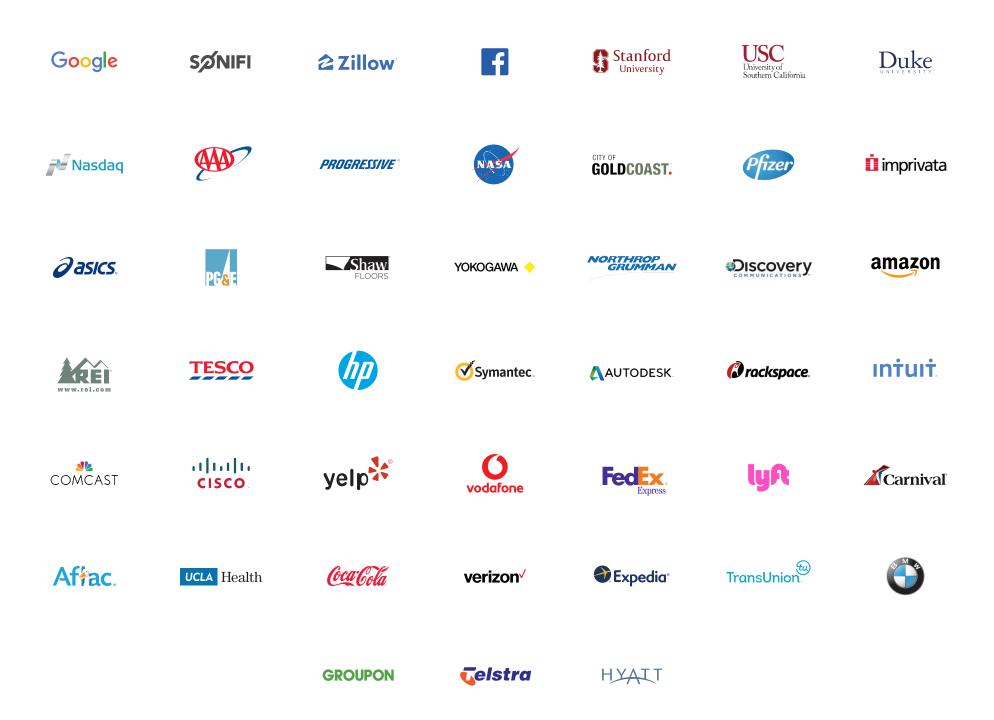
#### "With Splunk, we have an innovative partner that helps us tackle the challenges with digitization. For us, this is the future."

- Andreas Zientek, Systems Engineer, Zeppelin



Looking to the Future

The needs of tomorrow will hinge on data-first curiosity and adaptable innovation. With Splunk, you'll be ready.



## How the Fortune 100 **Turns Data Into Action**

## Splunk helps organizations all over the world — including 92 of the Fortune 100 — bring data to everything they do.

The following pages offer an in-depth look at more than two dozen customers who are using the Data-to-Everything Platform to elevate data security, improve IT operations, and bring deeper, more actionable insights to every decision.

# Financial Services





Business Use Cases Security Fraud

#### **Aflac** Adopts Analytics-Driven Security and Threat Intelligence

Aflac is the leading provider of voluntary insurance in the United States. Facing an onslaught of security threats, Aflac needed a new analytics-driven security platform to protect its customers, its nearly 10,000 employees and its brand reputation. The company deployed Splunk Enterprise Security (ES) and Splunk User Behavior Analytics (UBA) to orchestrate threat intelligence across 20 security technologies sitting within its internal threat intelligence system.

#### **BUSINESS IMPACT**

- · Blocked more than 2 million security threats in one six-month period
- Automated threat hunting and 90% of security metrics process in just two months
- Saved 40 hours monthly by replacing manual data collection and reporting

Watch the video: splunk.com/aflac-video





With Splunk at the heart of Aflac's security operations center (SOC), six teams of approximately 40 individuals rely on the platform to manage broad security use cases — from threat hunting, threat intelligence and incident response to application security, security administration and fraud. Providing tactical and strategic functions, the system now includes automation, which increases efficiency in the daily threat data feed, reduces errors and brings data to every security decision.

"From the perspective of an individual policyholder, I know they would want to know that we're doing everything we can to help keep their information safe. We are paying close attention to how we manage our own information as well as how we manage their personal information, and that's something that Splunk allows us to do."

- Ben Murphy, Vice President of Information Security, Aflac



Business Use Cases Security

#### **Blackstone** Automates Malware Investigation

As one of the world's leading investment firms, Blackstone can see 30–40 malware alerts in a single day. The firm's incident response team fully investigates each malware alert as if a compromise has already occurred — a process that can take more than 30 minutes if done manually.

#### **BUSINESS IMPACT**

- Reduced time to investigate malware alerts
- Increased accuracy and consistency across incident responses
- Instituted repeatable, auditable process for investigating malware alerts

Blackstone uses Splunk Phantom's apps and playbooks to execute automated actions quickly, from the moment a malware alert appears. First, Blackstone's security information and event management (SIEM) tool is queried for affected users; next, Phantom orchestrates a "hunt file" action in Carbon Black and queries various security databases before compiling its report. This information is immediately presented back to the security team in a quick-analysis format for review and action. Thanks to Phantom, the Blackstone team can now investigate issues faster and more accurately while spending less time performing tedious, repetitive tasks.



"Automation with Splunk Phantom enables us to process malware email alerts in about 40 seconds versus 30 minutes or more."

- Adam Fletcher, Chief Information Security Officer, Blackstone



**Business Use Cases** IT Operations Infrastructure Monitoring Security DevOps

#### **PSCU** Slashes MTTA and Bolsters Security With VictorOps and Splunk Enterprise

PSCU is the nation's premier payments credit union service organization, supporting more than 900 owner credit unions that represent over 2 billion annual transactions. To better enable its credit unions to compete with banks, PSCU aimed to improve key IT performance metrics, such as mean time to acknowledge (MTTA) and mean time to repair (MTTR).

#### **BUSINESS IMPACT**

- Accelerated MTTA from four hours to less than two minutes
- Enables cross-departmental collaboration and cost-efficient use case expansion across enterprise operations
- · Empowers staff with mobile monitoring access to deliver support from anywhere

Part of the Splunk platform, VictorOps empowers on-call teams with automated incident management routing that has slashed MTTA from four hours to less than two minutes. Based on this marked success, PSCU is expanding its reliance on Splunk with new use cases - from predictive insight to faster error detection in new software releases. Thanks to Splunk's unified platform, PSCU can now innovate faster, collaborate better and fulfill its mission of satisfying customers.

Watch the video: splunk.com/pscu-video



"Each PSCU IT department maintains an on-call schedule. VictorOps brought all the managers together with one tool. We understand what we're doing, and we all use the same escalation schedule. It drives accountability."

- Earl Diem, IT Operations Manager, PSCU



Business Use Cases Security

Fraud

"The Splunk analytics solution not only helps us master financial crime challenges and facilitate our operations, but also acts as a major catalyst for our business growth and success, keeping us in pace with the ever-changing business world."

— Takanori Yasuda, Planning Division Leader, Seven Bank, Ltd.

#### **Seven Bank** Fights Financial Crimes With Real-Time Log Correlation and Analytics

Seven Bank Ltd., a Japanese bank offering a variety of cutting-edge financial services to a broad base of customers, opens about 17,000 new user accounts monthly and operates more than 24,000 ATMs in Japan. With fast business growth and an increasing number of user accounts, Seven Bank needed a scalable approach to operational analysis and unauthorized access control.

With Splunk, Seven Bank integrates a broad range of data from multiple sources onto a central platform to automatically search, monitor and analyze the data in real time. Splunk then generates useful insights for spotting customer churn and patterns that indicate severe business impacts — as well as signs of unauthorized access through behavioral analysis — and notifies administrators of potential risks through a score-based alert system. This predictive analysis enables Seven Bank to help prevent unauthorized use of bank accounts, illegal money transfers and other financial crimes.

#### **BUSINESS IMPACT**

- Enhanced crime prevention, thanks to the integrated real-time visibility into anomalies and threats
- Streamlined operations and fraud analysis to enable the bank to keep pace with business growth, retain talent and cut human resources training time in half
- Improved risk assessment and management

# Retail





#### Industry Retail

**Business Use Cases** Security Monitoring Advanced Threat Detection

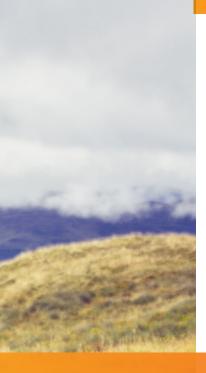
#### **REI** Gains Edge Protection With Splunk Cloud and AWS

National specialty outdoor retailer Recreational Equipment, Inc. (REI) believes a life outdoors is a life well-lived. As an organization known for its customer service and brand reputation, it comes as no surprise that REI wanted to extend its security posture to include edge protection of its Amazon Virtual Private Clouds as it migrated applications to Amazon Web Services (AWS).

#### **BUSINESS IMPACT**

- Delivered end-to-end security visibility during AWS cloud migration
- Enabled a security-oriented mindset through DevSecOps transformation
- Provides real-time insight into potential threats





The technology organization at REI comprises about 400 people across security, application, core infrastructure and DevOps teams. Previously, the organization lacked an investigation workflow that included AWS, so teams underwent a time-consuming process to manually extract and analyze the relevant data. As REI aggregates all security-relevant machine data in Splunk Cloud, the technology organization is bringing analytics insights to broader questions and decisions — yielding better outcomes across the business.

"We want to protect REI data — that's where we put our resources and invest time. Procuring Splunk Cloud has been a really good investment, not just for the capabilities it offers, but also for the time savings."

- David Bell, Manager, Infrastructure and Cloud Services, REI



Industry Retail/Manufacturing

Business Use Cases Security Fraud

#### **ASICS** Automates Incident Management With Real-Time Log Analysis

ASICS offers a full range of sports supplies and equipment aiming to create a quality lifestyle through intelligent sport technologies. To combat cyberthreats and address incidents at the moment they occur, ASICS required a central platform to manage, correlate and analyze logs generated from multiple systems.

#### **BUSINESS IMPACT**

- Developed real-time visibility into incidents and threats through automated log analysis
- · Enhances social accountability with improved security and visibility
- · Boosts efficiency and productivity due to streamlined operations

Teams at ASICS use Splunk to consolidate log data from all systems and analyze it on a central platform, generating insights and visibility into the entire operation in real time. All of these efforts are automated, allowing ASICS to monitor its data center around the clock with minimal manual intervention. By automating log management, ASICS saves valuable work hours while enabling its team to focus on high-value business activities.



"As an all-around analytics tool, Splunk Enterprise effectively supports our operation and generates great benefits for us. We believe the Splunk solution could be an energizer for the sports industry."

- Shigekazu Tanimoto, Global Security Lead, ASICS Corporation

Industry Retail **Business Use Cases** Process Mining Business Analytics IT Operations Application Delivery

#### Real-Time Operational Intelligence Keeps **Otto Group** Running 24/7

Founded in 1949, Otto Group is a worldwide retail and services group composed of over 120 companies — including OTTO, Germany's biggest online retailer for fashion and lifestyle products — across more than 20 countries. Otto Group needed a real-time monitoring solution and process mining tool to gain digital intelligence and end-to-end visibility into business processes.

#### **BUSINESS IMPACT**

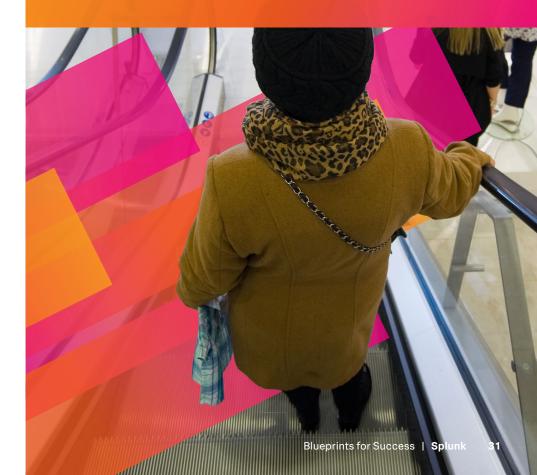
- Improved conversion rates of high-volume e-commerce processes
- Provided interactive visualization of end-to-end business processes
- · Enhances customer experience across multiple channels

Otto Group initially deployed Splunk Enterprise in OTTO's backend IT a decade ago to achieve a consolidated approach to infrastructure monitoring across critical business systems. Today, Splunk Business Flow automatically correlates data from multiple business systems to provide Otto Group with end-to-end visibility of the entire customer experience. By understanding how processes work together based on actual data, Otto Group can quickly detect and fix anomalies, as well as reduce the time needed to complete vital processes, from initial customer interaction to customer fulfillment.

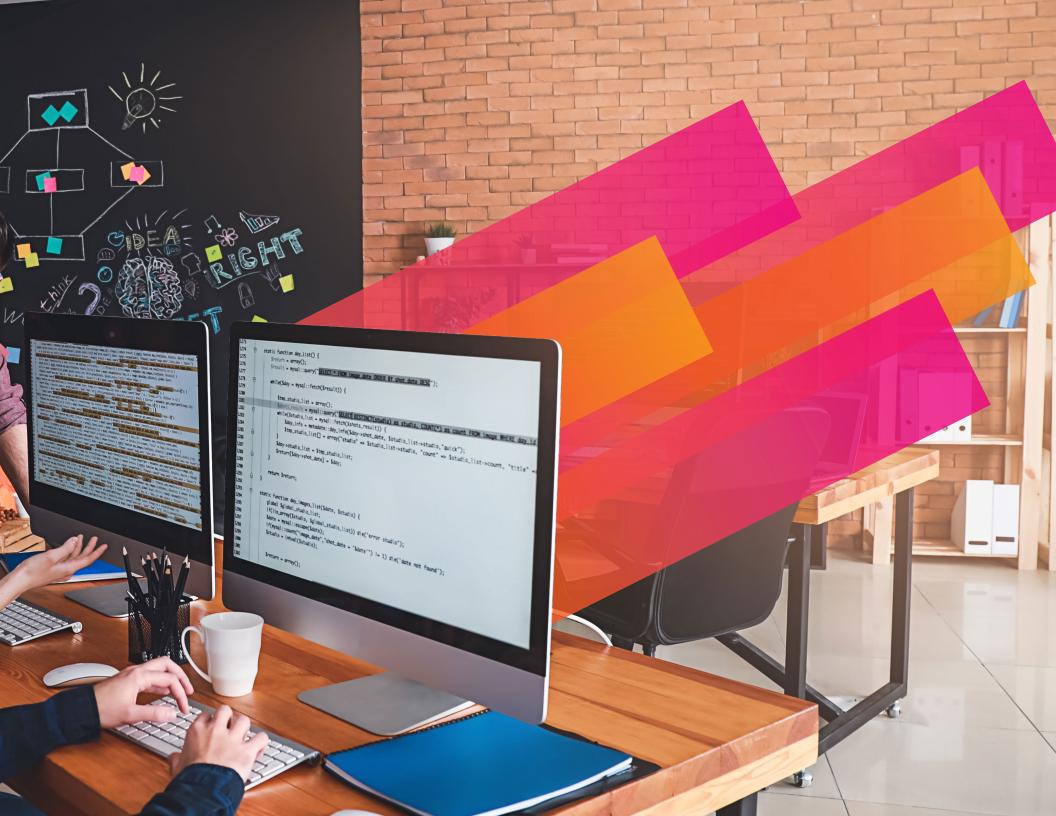


"We got together with the right people at Splunk to achieve things that we haven't seen before in any of the other tools out there."

- Andre Pietsch, Product Manager, Otto Group



# Technology



**Industry** Technology

Business Use Cases Security Orchestration, Automation and Response (SOAR)



"Splunk Phantom helped us automate a process that used up to 10 different security products and took an analyst 90 minutes or more to complete manually."

- David Neuman, Vice President and Chief Information Security Officer, Rackspace





## **Rackspace** Automates Phishing Investigations to Increase Efficiency

As the world's leading managed cloud company, Rackspace has more than 6,000 employees and an infrastructure that spans four continents. The organization needed a security orchestration, automation and response (SOAR) platform, and selected Splunk Phantom. Using Phantom's apps and playbooks, Rackspace can quickly execute data-driven actions, ensuring a repeatable and auditable process for investigating and remediating phishing attacks.

While even a typical day brings a nearly unmanageable workload, Rackspace's security team occasionally sees burst attacks with up to 300 phishing attempts in a single day. At this rate, it's easy for analysts to become overwhelmed, making responses slower and less consistent. With Phantom, Rackspace has been able to dramatically reduce the time required to handle phishing incidents. Competing priorities, afterhours requests and other issues that might cause delays in a coordinated response have become a thing of the past.

### **BUSINESS IMPACT**

- Slashed time to investigate phishing incidents from 90 minutes to under a minute
- Automated a manual process that had required up to 10 different security products
- Frees the team to focus time on investigations that require human insight

#### **Industry** Technology

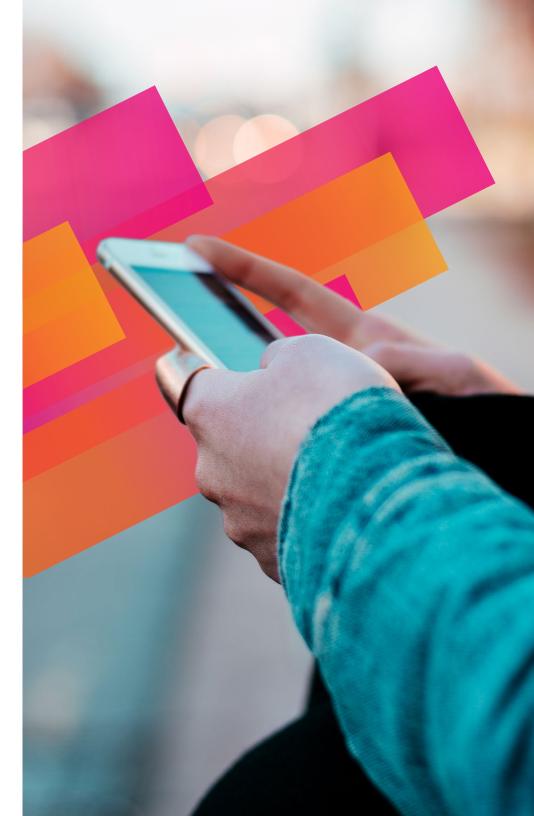
Business Use Cases IT Operations Infrastructure Monitoring DevOps

## **Entrust Datacard Corporation** Gains Unified Infrastructure Monitoring With Splunk

Entrust Datacard is a privately held security company that serves customers in 150 countries and manages billions of transactions annually. Recently, the company needed unified infrastructure monitoring and metrics to drive operational success while developing an innovative new cloud service.

#### **BUSINESS IMPACT**

- Modernized operations to introduce automation and deliver software faster
- Reduced the number of required monitoring tools while increasing coverage
- Ensures a positive customer experience with proactive, collaborative monitoring





Entrust Datacard uses Splunk Enterprise to collect machine data, and Splunk App for Infrastructure to make sense of the combined data. Fully monitoring the cloud infrastructure enables the company to maintain and improve the customer experience, especially by detecting and resolving problems in advance. When Splunk App for Infrastructure detects a critical incident, it is automatically reported to VictorOps, which makes it easy for on-call developers and support teams to collaborate and solve critical issues. Ultimately, the data and insights from Splunk allow Entrust Datacard to keep their customers more secure than ever.

"When we first started building IntelliTrust, we needed three different infrastructure monitoring tools to cover everything. Now, with Splunk Enterprise and the Splunk App for Infrastructure, we can do it all."

- Daryl Robbins, Senior Enterprise Cloud Architect, Entrust Datacard



Industry Technology/Real Estate

**Business Use Cases** IT Operations Application Delivery Business Analytics

## **Zillow** Gains Enterprise-Wide Visibility and Operational Insights

Zillow Group empowers consumers with data-driven insights into real estate questions. To achieve full operational visibility across its widely distributed infrastructure, Zillow deployed Splunk Enterprise as its real-time IT monitoring and intelligence platform.

#### **BUSINESS IMPACT**

- Achieved full visibility into service and quality metrics
- Delivers critical insights into site operations
- Improves customer website experience

Historically, the operations team relied on open-source or homegrown utilities for IT service monitoring and quality control. But these solutions could not keep up with the log data volume generated by disparate web properties and applications. Zillow knew it had to standardize its log and other data infrastructure management with a solution that could scale with its growing business and provide full operational visibility.

With the Splunk single-pane-of-glass view into the data, operations teams and developers alike can easily refer to the same dashboards, which in turn has improved DevOps collaboration, eliminated data siloes and created a more accurate picture of the entire IT and operations environment.

Watch the video: splunk.com/zillow-video



"Being part of the larger Splunk ecosystem is extremely valuable to us. We couldn't replicate that if we tried to build something on our own. ... We have given teams enough autonomy to create their own solutions on top of the Splunk platform."

- Seth Thomas, Director of Site Operations, Zillow



Industry Technology **Business Use Cases** IT Operations Application Delivery Business Analytics

## **Yelp** Democratizes Data to Ensure Great Customer Experience

Yelp connects millions of people with local businesses through its website and mobile app. To ensure a great global customer experience, the company has standardized on Splunk solutions, bringing actionable business insights to hundreds of technical and non-technical users — from site reliability engineers to product managers.

#### **BUSINESS IMPACT**

- · Uncovers business insights to improve the customer experience
- · Saves engineering hours by making the data accessible for all users
- · Improves website uptime with real-time notifications

While Splunk was initially an engineering phenomenon at Yelp, it quickly grew to serve the product management team, then further expanded into business operations. Here, it provides a holistic overview of the environment, which greatly boosts data availability and access, and surfaces insights that significantly improve the customer experience. With time to data availability now drastically reduced, users have new access to information that lets them make informed decisions on their own.

Watch the video: splunk.com/yelp-video



"I don't believe there is any other product on the market that is able to quickly bring together diverse data sets, offer a powerful language to engineers for data analysis, and then ultimately deliver beautiful, visual, actionable reports to the business users."

- Kris Wehner, Vice President of Engineering, Yelp



Industry Online Services

Business Use Cases Business Analytics IT Operations

## **SONIFI** Solutions Saves More Than \$1.2 Million Annually

SONIFI Solutions Inc. provides interactive television, streaming and internet services to more than 1 million hotel rooms and 500 million people annually. With manual processes and large volumes of data in multiple places, the company struggled to quickly understand and act on its data. Additionally, SONIFI spent weeks generating reports, with significant amounts of time dedicated to developing tables to structure the raw data before testing and reporting on it.

#### **BUSINESS IMPACT**

- Saved \$85,000 annually by centralizing reporting and streamlining processes
- Saved \$100,000 monthly \$1.2 million annually by correlating viewing habits with billing data and detecting questionable cancellations
- Reduced reporting time from days to minutes

Watch the video: splunk.com/sonifi-video





With Splunk, the team can now seamlessly ingest the same data — no tables or structure required. This ability cuts data query time from one day to one hour, and the time savings enables engineers to detect bugs and generate accurate reports faster. SONIFI now also uses Splunk to bring data to its billing decisions, saving \$100,000 monthly by correlating customers' viewing habits with billing data, detecting questionable cancellations and implementing preventative processes.

"Before, we were cross-referencing multiple databases, building massive spreadsheets, which was very manual and tedious. Splunk put all of that information into a visual format that's usable, empowering us to make better decisions. Previously, what had taken us days, we're now able to do in hours, if not minutes."

- Kara Heermans, Vice President of Product Management and User Experience, SONIFI Solutions Inc.



# Travel and Transportation





**Industry** Travel and Transportation

Business Use Cases Application Delivery Business Analytics IT Operations Security Monitoring Log Management



"Splunk allows our developers to focus on developing instead of wasting their time looking for the issues. If they can find the issue faster, then they can go back to development."

- César Mendoza, Application Development Manager, Strategic Systems and Innovation, Hyatt Hotels



44 Splunk | Blueprints for Success

## **Hyatt** Reduces MTTR and Gives Developers More Time to Innovate

Hyatt Hotels Corporation is driven by its purpose "to care for people so they can be their best." Ensuring hotel guests have a seamless, enjoyable experience is a key part of this purpose. To provide an exceptional experience, Hyatt needed a centralized solution to monitor and troubleshoot server issues and improve application delivery.

Prior to Splunk, the online check-in experience was not as reliable, due to a time-consuming troubleshooting process. Developers had to log into an individual server and run a search tool to figure out what was happening, which could take hours. The team also didn't have a way to determine whether an issue was local to one server or occurring across multiple servers. With Splunk's technology, Hyatt's team can troubleshoot server problems quickly, resulting in faster issue resolution and a better guest experience. In the future, predictive analytics will provide further insight into hotel room occupancy and more.

#### **BUSINESS IMPACT**

- Reduced mean time to resolution (MTTR) from hours to real time
- Increases developer bandwidth and productivity
- Improves customer experience with proactive monitoring

**Industry** Travel and Transportation Business Use Cases Security Monitoring IT Operations Application Monitoring Infrastructure Monitoring

## **Carnival** Navigates Sea of Data With Splunk

Carnival Corporation — the world's largest leisure travel company — serves 12 million people annually and has 250,000 guests on the water at any time. The organization has an astounding number of complex systems, which collectively generate hundreds of data sets that could provide insights to improve the customer experience.

## **BUSINESS IMPACT**

- Enables secure transactions across land and sea
- Provides seamless internet connectivity and onboard app usage
- Ensures the booking process meets customer expectations and generates revenue

Watch the video: splunk.com/carnival-video





Splunk has allowed Carnival Corporation to aggregate data from across its 100+ ships and corporate offices, mining it for insights to better serve guests. Splunk IT Service Intelligence (ITSI) helps the IT team monitor the website and ensure a smooth customer booking process on Carnival. com, where the company generates the majority of its revenue. With Splunk Cloud and Splunk Enterprise Security (ES), Carnival also improved connectivity for guests, delivering more secure mobile access and enhancing the guest experience overall.

"One of the problems we've had in the past was making sure that we could have visibility across the different brands. Splunk has given us an opportunity to consolidate that view across our ships and 10 corporate offices around the world. We now have the ability to bring that data together, and interrogate it in ways that we've never been able to do before."

- Gary Eppinger, Chief Information Security Officer and Global Privacy Officer, Carnival Corporation



Industry Travel and Transportation/Energy

Business Use Cases Industrial Data Internet of Things IT Operations

## **Sapura** Teams With Splunk for Connected Ship, Shore and Subsea IoT

Brazilian shipping company Sapura maintains a fleet of high-tech vessels that perform subsea pipeline installation services. The organization needed real-time visibility to monitor its complex systems and connected vessels, ensure compliance with safety standards and avoid potential environmental disaster. Since deploying Splunk Enterprise and Splunk for Industrial IoT, Sapura has taken a more data-driven approach to subsea operations.

#### **BUSINESS IMPACT**

- Earned a rapid return on investment
- · Increased track record of safe, productive operations
- Gained a real-time view of complex industrial systems

Before Splunk, Sapura crews could only monitor critical parts of their systems when onboard their vessels. Today, dashboards in Splunk Enterprise provide real-time insights to the headquarters in Rio de Janeiro, as well as crews at sea. Having such visibility through Splunk Enterprise and Splunk Industrial IoT has been crucial for predicting and preventing failures during operations.



"The better you are on safety standards, the closer you are to [avoiding] operational accidents, and that's what drives us. Splunk for Industrial IoT is a key factor for our company strengthening our safety and operational standards."

— André Merlino, CEO, Sapura Brazil



**Industry** Travel and Transportation

Business Use Cases IT Operations Security Internet of Things

## **Dubai Airports** Flies Into the Future With Splunk

Expecting to serve 100 million travelers annually — and to provide exceptional services to each of them — Dubai Airports turned to Splunk Enterprise. The airport meets its target to get 95% of passengers through security in five minutes or less by monitoring metal detectors to identify trends that keep queues moving efficiently. The IT team monitors all of its Wi-Fi access points in real time, detecting and dealing with congestion and rogue hotspots as they arise.

#### **BUSINESS IMPACT**

- Moves 95% of passengers through security in five minutes or less
- · Provides the world's fastest airport Wi-Fi, with zero black spots
- Delivers consistent, high-quality customer experience

Each bag in Dubai Airports baggage system creates more than 200 data points, all of which are monitored in Splunk Enterprise to make sure bags reach their intended destinations. The airport is able to allocate resources effectively by combining baggage data with operations data to predict baggage load. Dubai Airports needed to increase airport capacity without any additional terminal space, infrastructure or runways. Using Splunk to uncover actionable data insights, the airport is doing just that.

Watch the video: splunk.com/dubai-airport-video



"We are using Splunk to dramatically improve the travel experience for millions of people."

 Michael Ibbitson, Executive Vice President, Technology and Infrastructure, Dubai Airports



# Manufacturing



Industry Manufacturing

Business Use Cases Splunk Enterprise Splunk Machine Learning Toolkit Splunk DB Connect

## **Zeppelin** Takes Predictive Maintenance to New Heights With Splunk

German company Zeppelin is globally renowned for its solutions in machinery, construction logistics, engineering and more. The manufacturer needed a monitoring solution that would provide a comprehensive view of its complex IT infrastructure while also supporting its services business, which relies on the ability to remotely monitor rental equipment by analyzing sensor data.

## **BUSINESS IMPACT**

- Enabled predictive maintenance for faster troubleshooting and better resource allocation
- Improved customer satisfaction and equipment uptime
- Aggregates data from thousands of IoT devices for richer, real-time insights

Watch the video: splunk.com/zeppelin-video





After achieving success with Splunk as a monitoring tool, Zeppelin expanded the platform to new use cases, including IoT. Splunk helps Zeppelin sift through volumes of generated data to gain meaningful business intelligence and develop innovative solutions to improve customer satisfaction, save costs and increase business efficiencies. By tracking critical machine data to detect deviations, Splunk also allows the team to proactively resolve current issues, preventing costly shutdowns and enhancing customer service.

"Without this technology, you are blind. You have thousands of devices sending data, and it can take a lot of time to find the problem."

- Andreas Zientek, Systems Engineer, Zeppelin



Industry Manufacturing

Business Use Cases Industrial Data Internet of Things

## Splunk IoT Insights Help **Shaw Industries** Break Production Records

With annual sales nearing \$6 billion, Shaw Industries Group Inc. supplies carpet, hardwood, tile, stone and laminate flooring products, as well as synthetic turf, to residential and commercial markets around the world. Shaw Industries implemented Splunk Enterprise for real-time factory floor analytics based on IoT data, which provided new business insights that improved production performance and spurred friendly competition among plant workers.

#### **BUSINESS IMPACT**

- · Gained new business insights to improve work-order lead times
- · Increased sample panel production output significantly
- Reduced energy usage to significantly cut costs

Initially, Shaw Industries adopted Splunk's solutions to provide visibility into a new post-consumer recycling facility. But the ease of ingesting plant data and correlating disparate industrial data streams encouraged additional Shaw manufacturing plants to implement their own Splunk instances, resulting in a corporate initiative that spanned 37 manufacturing facilities. Today, about 300 managers and engineers are trained to write Splunk searches for their own machine and enterprise data, uncovering key insights that continue to break records and raise the bar on productivity.

Watch the video: splunk.com/shaw-industries-video



"We're all about speed and servicing the customer. ... Splunk has helped us drastically increase speed to drive our business."

- Gabriel Gerges, Samples Division, Shaw Industries Group



Industry Retail/Automotive Services

Business Use Cases Security Compliance

## **Heartland Automotive** Protects Both Data and Brand With Splunk

Heartland Automotive, which operates nearly one-quarter of the U.S. Jiffy Lube stores — 531 locations across 26 states — needed a cybersecurity platform to protect its brand as well as its data. Since deploying Splunk Enterprise Security (ES) and Splunk User Behavior Analytics (UBA) as its integrated security information and event management (SIEM) platform, Heartland Automotive has experienced numerous benefits.

#### **BUSINESS IMPACT**

- Realized time to value from implementing Splunk SIEM in only three weeks
- · Established real-time security investigations and insider threat protection
- Drives innovation with 25% lower total cost of ownership

With Splunk, Heartland Automotive has implemented a new security program that includes a security operations center, new policies and procedures, and better PCI compliance. With end-to-end visibility into its security posture and potential threats to the enterprise, the security team can efficiently prioritize and resolve issues. With the power of machine learning in Splunk UBA, Heartland Automotive eliminates blind spots and provides a big-picture overview of its environment, enabling teams to monitor and assess patterns of behavior and respond quickly.

Watch the video: splunk.com/heartland-automotive-video



"Data is our most critical asset, and as a retailer, the ability to have a platform to help protect our brand is everything."

 Chidi Alams, Head of IT and Information Security, Heartland Automotive Services



**Industry** Manufacturing

**Business Use Cases** Application Delivery

"While many companies involved in the development of DCS and other critical plant systems still use legacy software and source codes, Splunk enhances our operations with cutting-edge technologies and empowers us to derive unprecedented values from machine data."

- Satoshi Tada, Group Leader, Development and Engineering, Yokogawa

## **Yokogawa** Drives DevOps, Accelerates Data-Driven Insights With Splunk Enterprise

A leader in distributed control systems (DCS) and other plant facility–related systems, Tokyobased Yokogawa Electric Corporation enables automated operation in plants and contributes to the development of oil, gas, chemicals, electronics and other industries. The company deployed Splunk Enterprise to address numerous emerging challenges as it continued to embrace the DevOps approach to application development and deployment.

Yokogawa needed real-time DevOps visibility to face monitoring and troubleshooting challenges from highly distributed applications that generate a diverse volume of logging data. Splunk's ability to ingest huge amounts of data from widely varying sources lets Yokogawa conduct systematized analysis from multiple perspectives. By integrating Splunk into its DevOps infrastructure and centralizing log data, Yokogawa successfully automated its data collection, analysis and reporting procedures. The resulting end-to-end visibility into every DevOps process has transformed static data into dynamic, proactive insights.

#### **BUSINESS IMPACT**

- Heightened DevOps quality thanks to dynamic, data-driven insights
- Boosted operational efficiency with flexible use of data and improved DevOps collaboration
- Enhanced effectiveness with real-time, end-to-end visibility



# Healthcare



Business Use Cases Security Application Monitoring

## **NewYork-Presbyterian** and Splunk Implement New Approach to Guard Against Opioids Misuse

One of the nation's most comprehensive healthcare systems, NewYork-Presbyterian is consistently recognized as a leader in medical education, research and care. Dedicated to patient security, the hospital system began using Splunk to monitor IT security operations and aggregate data from hundreds of clinical applications, systems and data sources. Soon, NewYork-Presbyterian recognized that Splunk could be used to build a platform to more closely safeguard controlled substances and other medications.





#### **BUSINESS IMPACT**

- Expanded proactive security measures to protect patient privacy through an enhanced data analytics tool
- Developed a monitoring platform to guard against diversion of controlled substances, including opioids
- Gained real-time insight into data across hundreds of clinical applications, systems and other sources

"NewYork-Presbyterian is at the forefront of using advanced technology to protect our patients and provide innovative, compassionate care. We are pleased to collaborate with Splunk so that NewYork-Presbyterian is among the most secure hospital systems in the nation."

— Jennings Aske, Senior Vice President and Chief Information Security Officer, NewYork-Presbyterian



The enhanced Splunk controlled substance monitoring platform will enable NewYork-Presbyterian to track data from electronic health records (EHRs), Electronic Prescription of Controlled Substances (EPCS) platforms, pharmacy dispensing systems and other sources, delivering insights to guard against the diversion of these medications. With the enhanced system, NewYork-Presbyterian when will be able to see if drugs are being diverted for potentially illegitimate purposes, ultimately benefiting the greater healthcare community.

#### **Industry** Healthcare

Business Use Cases IT Operations Container Monitoring Security

## **Imprivata** Secures Healthcare Data With Splunk

Imprivata provides global healthcare organizations with a security and identity platform that delivers ubiquitous access, positive identity management and multi-factor authentication. Splunk is essential for visibility and stability in Imprivata's operational environment, which uses Docker and Kubernetes containerization and Python automation controls to monitor resources deployed in Amazon Web Services.

#### **BUSINESS IMPACT**

- Streamlined compliance auditing
- Reduced on-premises infrastructure cost and management burden
- Frees engineering staff to pursue business value

Splunk Cloud lets Imprivata glean answers from machine data without needing to manage infrastructure. As a result, engineers at Imprivata are able to spend their valuable time troubleshooting issues, working with performance metrics and conducting root-cause analyses. Simplified compliance with HIPAA and other regulations means Imprivata can securely analyze, visualize and monitor machine data from any source — including electronic health record systems and connected medical devices.



"As a security company in healthcare, we take everything to a higher level of security. So we work with Splunk."

- Manager, Cloud Platform Team, Imprivata

#### **Industry** Healthcare

Business Use Cases IT Operations Security

## **Molina Healthcare** Gains Healthy Advantage With Splunk

Molina Healthcare arranges the delivery of managed healthcare services under the Medicaid and Medicare programs to serve 4.2 million individuals and families across the United States. Molina uses Splunk to transform its explosive operational data into actionable data, better serving the business and its customers.

## **BUSINESS IMPACT**

- Mines data to better understand trends and improve healthcare services
- Ensures revenue-generating claims engine runs smoothly
- Reduced mean time to resolution (MTTR) by 63%

With Splunk Enterprise and Splunk ITSI, Molina's Enterprise Infrastructure Services team has escaped ad hoc troubleshooting. Issues are now resolved in minutes, eliminating hours of coordinating with various groups and tools in a process of elimination. The company cut IT incidents to one-fifth of previous levels, and slashed MTTR by 63%.

Thanks to Splunk, Molina has gained a real-time view of its data across the enterprise. While claims engine outages used to hurt revenue, IT's newfound systems visibility allows the team to ensure uptime of the claims engine — the company's lifeblood — while reducing manual processes and better aligning with the business.

Watch the video: splunk.com/molina-healthcare-video



"Trying to implement something similar with legacy tools would have required lots of time and millions of dollars in professional services and upgrades."

- Ben Gordon, Vice President of Enterprise Infrastructure Services, Molina Healthcare



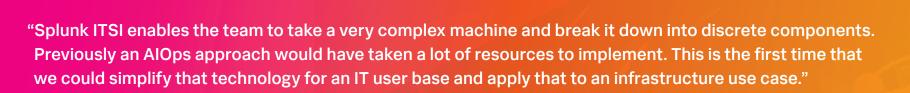
# **Public Sector**



Industry Public Sector

### **Business Use Cases**

IT Operations Application Monitoring Infrastructure Monitoring Predictive Analytics Industrial Data Internet of Things Security Monitoring



- Philip Adams, CTO and Lead Architect, National Ignition Facility, Lawrence Livermore National Laboratory

66 Splunk | Blueprints for Success



## **National Ignition Facility** Unlocks the Potential of Clean Energy and Safeguards the U.S. Nuclear Stockpile

The National Ignition Facility (NIF), located at California's Lawrence Livermore National Laboratory, is the world's largest laser. To support the NIF's core missions, including nuclear stockpile stewardship and scientific discovery, scientists and engineers require a secure, reliable IT infrastructure. Splunk Enterprise and Splunk IT Service Intelligence now sit at the heart of the NIF's control system, which manages more than 66,000 control points to power NIF's massive laser facility.

After bringing network, authentication and host data into Splunk to solve security challenges, the team aggregated this data with a variety of other sources to gain real-time visibility across the facility. The lab's engineers can now take action on events based on everything from application data to sensor data like laser voltage, temperature and pressure.

## Watch the video: splunk.com/nif-video

#### **BUSINESS IMPACT**

- Maximized system uptime
- Improved control systems reliability, enabling team to maintain necessary systems to double the number of laser shot experiments from 200 to 400 annually
- Ensures health of more than
   66,000 IoT devices, in addition to
   IT infrastructure

Industry Public Sector

Business Use Cases Security

## **City of Gold Coast** Gains Real-Time Visibility for the Commonwealth Games

City of Gold Coast, the second largest local government in Australia, has 3,900 staffers and provides a range of services, activities and facilities for residents and visitors. Hosting the 2018 Commonwealth Games was an added impetus for the city to enhance its security operations and visibility across the organization. Since ensuring the safety of thousands of people is a key challenge faced by the host of any major sporting event, City of Gold Coast deployed Splunk to fortify its security posture.

#### **BUSINESS IMPACT**

- · Consolidated monitoring and investigation for better efficiency and security
- Mitigated risk in a heightened threat environment
- Delivered real-time visibility into security events across diverse environments and systems





In deploying the Splunk platform, City of Gold Coast mitigated cyber risks and kept event attendees and the local community safe. With Splunk's help, the city established a core cybersecurity operations capability that would meet its current and future needs, beyond the games. The success of the service, cemented by Splunk's ability to monitor during the heightened threat period, has established confidence across the organization and made the city's security committee more prepared than ever before to handle threats.

"Splunk allowed us to leapfrog our security service maturity. With the service now stabilized and operational cadence established, we are ready for new use cases and new data sources in other areas of the organization."

- Matthew Walker, Information Technology Security Advisor, City of Gold Coast



# Education



### Industry Education

Business Use Cases IT Operations Security

### **Jefferson County Public Schools** Enables Secure 21st-Century Learning With Splunk Enterprise

Colorado's Jefferson County Public Schools is a K-12 district that requires technology to ensure a high-performing, flexible and secure learning and teaching environment. The five-member security team supports 86,000 students and 15,000 staff in 156 schools with firewalls, email gateways, investigations and other security defenses.

### **BUSINESS IMPACT**

- Delivers wireless uptime of 99.99% to 100,000 devices across 700 square miles
- Reduced mean time to resolution (MTTR) to 30 minutes or less
- Supports complex distributed IT resources with small IT staff

To prevent the district's physical security monitoring devices from outages, the team now relies on Splunk Enterprise to monitor error codes and proactively alert staff, who can repair systems before they crash. The Splunk platform also helps the district address cyberbullying issues by letting the team track system usage, user and device access.



"K-12 schools are always under tight budgets. With Splunk, two of us can manage our large network without pain."

- Michael Kent, Wireless Network Engineer, Jefferson County School District, Colorado



### Industry Education

Business Use Cases Security Fraud Business Analytics

# **Arizona State University** Gains Real-Time Insight Into the Student Experience

As the largest educational institution in the United States, Arizona State University (ASU) originally turned to Splunk to address multiple security use cases and protect students and faculty against fraud — but soon discovered that Splunk's potential extended far beyond just security.

### **BUSINESS IMPACT**

- Reduced payroll and direct deposit fraud for more than 14,600
   employees, saving \$780,000 annually
- Gained visibility into the holistic student experience across campus
- Enhances student and employee experience by resolving student issues faster and ensuring student integrity and privacy

Thanks to Splunk, ASU safeguarded its \$889 million annual payroll, saving \$30,000 every two weeks. After such success, ASU used Splunk to consolidate key data to better understand the student experience across campus. University teams can now address student problems quicker, answer critical business questions and improve the student experience through expanded Wi-Fi availability, suggested classes and more.



"With over 150,000 students, faculty and staff at ASU, we are constantly ingesting data from multiple different sources. Thanks to Splunk, we now have visibility into the student experience and can collect, aggregate and report on data to make business decisions faster than ever before."

- Nate Plamondon, Splunk Architect, Arizona State University



### Industry Education

**Business Use Cases** Security IT Operations Business Analytics

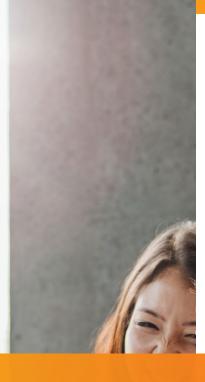
# **Clemson University** Empowers Student Success With Splunk

Ranked among the top 25 national public universities by *U.S. News & World Report* for over a decade, Clemson University is dedicated to delivering an exceptional experience for each of its more than 20,000 students. Recognizing the importance of data-driven decision making, Clemson uses Splunk to gain strategic insights, achieve institutional goals and remain secure and competitive for talent and students.

### **BUSINESS IMPACT**

- Helps improve academic performance and student experience by identifying and providing support to at-risk students
- Improved online learning with the ability to quickly and accurately analyze course activity, then share visualizations with campus leadership
- Reduced misreported errors and mean time to resolution for support tickets with increased data visibility for help-desk personnel





With Splunk at the heart of its digital infrastructure, Clemson turns data from multiple sources — such as the university's learning management system (LMS) — into outcomes that can improve student success. For example, Clemson uses Splunk to interpret LMS data that reflects students' log-in habits, interactions with the platform and material download/ review patterns. This insight helps Clemson create a complete picture of a successful student and use it to identify at-risk individuals and provide additional support to improve grades.

"Before adopting Splunk, we made decisions based on intuition and had siloed visibility into our IT, network and security operations. Splunk gave us a unified view of our enterprise and allowed us to begin exploring how data could solve challenges at the institutional level, not just in security and IT."

- Nitin Madhok, Director of Business Intelligence and Advanced Data Analytics, Clemson University





# Nonprofit



Industry Nonprofit Business Use Cases Business and IT Service Monitoring Regulatory Compliance Industrial Data Internet of Things

# **Rise Against Hunger** Focuses Critical Mission With Splunk Enterprise

International humanitarian relief organization Rise Against Hunger distributes food and critical aid to vulnerable populations, aiming to eliminate hunger by 2030. To further this goal, Splunk partners with the organization to help package and track meals, and helps the group understand and gain control of its data to better meet mission-critical objectives.

### **BUSINESS IMPACT**

- Rationalized and prioritized 180+ disparate systems across its
   IT environment
- Provided supply-chain visibility into worldwide delivery and distribution of meals
- Established a clear, efficient way to enhance data privacy and demonstrate regulatory compliance

With Splunk, Rise Against Hunger can now fully execute data-driven decisions, bringing all the data from disparate systems into one place to better report on regulatory compliance and find critical insights. As part of a greater effort to provide full visibility across the entire supply chain, Splunk will also help the organization track millions of packaged meals on a global scale, and reverse engineer their trajectory from a corporate volunteer to a beneficiary.



"Splunk is helping us work toward a full roadmap to gain visibility across the entire supply chain. The technology and partnership will help to drive the organization forward."

- Sheryl Gustafson, Director of Technology Solutions and Services, Rise Against Hunger



### Industry Nonprofit

Business Use Cases Business Analytics IT Operations

## **NetHope** Uses Data to Tackle Global Disasters and Refugee Crises

Communication is essential in a crisis. If the government of an affected country decides it needs outside aid, relief agencies must coordinate to quickly direct aid to where it's needed most. This coordination effort is the mission of NetHope, a consortium of nearly 60 leading global nongovernmental organizations (NGOs) that collectively deliver more than 60% of all international, non-governmental aid every year. Through Splunk for Good, Splunk provides technology that helps NetHope better manage and understand its data to communicate valuable insights.

### **BUSINESS IMPACT**

- Built insights into the networks and devices that NetHope deploys, letting the team manage and maintain gear in the field
- Enables data-driven planning for how to scale networks
- Amplifies humanitarian impact by providing partners with the first-ever mechanism to measure the impact of connectivity on field operations

With Splunk's help, NetHope has created an integrated network operations center for its nearly 300 distributed networks. The team can now better maintain these networks, giving their partners insights into how they're being used. With the newfound ability to build analytics around network health, NetHope can engage in proactive network planning, not just network maintenance.



"Being able to communicate specifically the impact of this program in this place around our connectivity and network initiatives gives us leverage that, to my knowledge, no one else in this sector has."

— John Crowley, Director of Information Management and Crisis Informatics, NetHope



### Industry Nonprofit

Business Use Cases Security Business Analytics

## **Global Emancipation Network** Helps Eliminate Human Trafficking With Splunk

Global Emancipation Network harnesses the power of data analytics and intelligence to help eliminate human trafficking across the globe. Combatting everything from labor trafficking and sex trafficking to child soldiering and domestic servitude, the nonprofit partnered with Splunk to launch Minerva, a human trafficking investigation platform. Powered by Splunk and funded in part by Splunk for Good, Minerva enables informationsharing and collaboration across law enforcement, government agencies, and nonprofit and commercial organizations.

### **BUSINESS IMPACT**

- Developed investigation platform to help fight and eradicate human trafficking across the globe
- Improves multi-agency collaboration on shared investigations by allowing all Minerva users to securely access and store information in the same database
- Accelerates investigations through advertisement analysis, image processing and text analysis

Watch the video: splunk.com/global-emancipation-network-video





Through the Global Emancipation Network, organizations with valid counter-trafficking missions can access Minerva to share millions of trafficking-related data records. These users can leverage customized search, alerting, geolocation and other platform capabilities like advertisement analysis, image processing and text analysis tools. For example, Minerva analyzes advertisements from the open web — where most trafficking cases originate — to extract identifying information and automatically link advertisements to images of victims and missing persons reports.

"My life mission and that of Global Emancipation Network is to completely eradicate human trafficking with a weapon not yet used properly in the fight: data and analytics. By arming law enforcement and its allies with newly accessible critical information, we are going to disrupt this heinous multibillion-dollar black market industry, which affects millions of lives."

- Sherrie Caltagirone, Founder and Executive Director, Global Emancipation Network





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