How to Take the sh Out of IT

8 issues keeping IT operations professionals awake at night and how to solve them

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The Greek philosopher Heraclitus is the first person quoted as saying, “The only constant is change.” (He also said, “We are most nearly ourselves when we achieve the seriousness of the child at play,” which is cool, except when adults try hopscotch.)

If you’re an IT professional in a growing organization, we know it’s a constant challenge to keep up with change. How can you be expected to keep track of all your stuff when people keep putting it in clouds? And *containers*? That almost makes it sound like they don’t want you to find it.

Splunk is world-renowned for our range of T-shirts that exploit common technology terms for comic effect. One shirt says, “Take the sh__ Out of IT,” cleverly referencing a swear word popular among many English-speaking peoples.

But it’s more than a slogan. We know you face a maelstrom of sh_ every day — and sometimes in the middle of the night. We’re here to help, by laying out some of the most fundamental IT issues and offering ways to fix them.

01

“How am I supposed to do all this sh__?”

You can’t plan, innovate or improve if you’re constantly responding to alerts.

You might feel like the only thing that’s grown faster than your workload is the weight of responsibility on your shoulders. While the demands you face are bigger and hairier than ever, so is your potential value to your business or organization. You might also feel growing frustration at the thought of what you could be doing. Unfortunately, it seems the only two things that haven’t grown are your budget and your headcount.

(Note: If you actually do have something big and hairy growing on your shoulder, please see a doctor.)

There are lots of reasons why it’s bad to be overworked, but one seems most critical; you might miss some important sh_. In our experience with thousands of customers, the best way to ensure focus is to drive a stake into the heart of the energy vampire draining the lifeblood from your organization. (Eww.)

Solution: Event Management

As your environment has grown, your monitoring solutions may have grown out of control, too. Modern, domain-agnostic solutions collect data generated across your environment and use advanced analytics and machine learning to quickly and accurately prevent problems before they happen — or pinpoint the root cause immediately when they do. Event management could be the single best solution to help you take back control and get out of constant reactive mode.

02

“I’m tired of taking sh__ from everybody”

You can’t prioritize when every problem is treated like an emergency.

There are all kinds of people in the world, which means there are some people who enjoy service outages and squabbling childishly with colleagues. Those people are weird. For the rest of us, outages are big, expensive pains in the butt.

An IT war room is designed to:

- bring together the relevant stakeholders.
- identify the root cause of an outage.
- resolve the problem.
- determine how to keep it from happening again.

In reality, IT war rooms often include:

- hand-wringing.
- finger-pointing.
- butt-covering.
- weeping and gnashing of teeth.

Many organizations have stopped calling them war rooms. Somehow, that change alone has not made them fun. Or efficient. How about we eliminate the need for war rooms altogether?

Solution: Incident Response

If you want to make on-call suck less, the solution is modern incident response that lets you automate time-sensitive aspects, including escalations, war rooms and post-incident reviews, so your teams can focus on resolving incidents. Organizations using automated incident response report mean times to acknowledge (MTTAs) plummeting (yes, plummeting) from hours to just a few minutes.

03

“Why am I suddenly in deep sh__?”

It’s hard to maintain customer confidence if they notify you of an outage.

You probably love your customers as much as we love ours. That doesn’t necessarily mean you want to hear from them at 3 o’clock in the morning. Nobody likes getting caught with their pants down (assuming you’re still wearing pants). Maintaining a high standard of customer service can be hard, but not as hard as explaining to your customer why they know more than you do. Or convincing them to let you keep managing their customer experience when you can’t, you know … manage their customer experience.

Solution: ML-Powered Service Monitoring

Like many things in life — bowling, for instance — service monitoring can be difficult and embarrassing if you don’t have the right equipment. Service monitoring solutions powered by machine learning take the historical data generated by your systems and combine it with real-time data to predict when issues are likely to occur. Just because it ain’t broke yet doesn’t mean you can’t fix it.

04

“Same sh__, different day”

You can’t improve your MTTR if you don’t track problem resolutions and learn from them.

Albert Einstein is widely quoted as saying, “The definition of insanity is doing the same thing over and over again, but expecting different results.” In fact, that quote comes from author Rita Mae Brown, from her 1983 novel *Sudden Death*. (Attributing the achievements of women to men is the definition of something else entirely.) Anyhoo, fixing the same IT problems over and over again without using the experience to learn how to prevent them is the definition of, umm … not good.

Where were we going with this? Oh, right.

Solution: AIOps

AIOps is the practice of applying analytics and machine learning to big data to automate and improve IT operations. AIOps can automatically analyze massive amounts of network and machine data to find patterns, both to identify the cause of existing problems and to predict and prevent future ones. Every step that goes into identifying, diagnosing and fixing an IT issue creates valuable data to fuel an automated AIOps system that will quickly resolve issues, relieving you and your team from a huge amount of tedium.

05

“Where’s my sh__?”

You can’t use your data if you can’t find or identify it.

You’ve probably heard us talk about Dark Data before. And while it sounds like a goth band made up of statisticians, it’s a real problem for pretty much every company. More than half of the average organization’s data is unused, either because companies don’t know it exists or because they don’t know what kind of data it is.

Imagine you’re in a dark cave, you don’t have a flashlight, you don’t know what you’re looking for and standing at the cave mouth are a bunch of VPs shouting into the dark asking if you’ve found anything yet. A data-driven platform like Splunk is designed to find that missing data, parse it, make sense of it and help you use it to fuel your decision making.

Solution: Infrastructure Monitoring

Modern monitoring of hybrid environments relies on the Three S’s: speed, scale and … sanalytics. Designed for hybrid and cloud environments, data-driven infrastructure monitoring can help you avoid overspending on operational and cloud costs, consolidate toolsets and accelerate your cloud migration with confidence. Organizations using infrastructure monitoring are seeing benefits that can be measured in the millions of dollars.

06

“This sounds like marketing bullsh__”

If data is your most valuable asset, what are you supposed to do with it?

Sure, data is valuable and you get that. Knowing what happened across your environment in the past is the key to knowing what’s likely to happen in the future, whether you’re predicting outages or the sales team is predicting next quarter. But how exactly does data help you, the IT Operations professional, in a practical sense?

In simple terms, if you mash up all your data into one big wad and shove it into the right hole, knowledge will pop out the other end.

Okay, that was too simple.

Data feeds machine learning, and machine learning is the key to data-driven insight. A data-driven IT monitoring platform takes your data and uses it to predict what’s going to go wrong before it does, so you can stop it from happening. Your IT team becomes steely-eyed guardians of revenue, reputation and customer satisfaction — which sounds a lot better than “overhead,” doesn’t it?

Solution: Observability

Observability allows teams to monitor modern systems more effectively and helps them to find and connect effects in a complex chain and trace them back to their cause. It gives system administrators, IT operations analysts and developers visibility into their entire architecture. By bringing together the power of metrics, traces and logs, observability solutions help organizations monitor, explore and troubleshoot their entire stack in one platform.

07

“Sh__ keeps hitting the fan”

You can’t solve the real problems until you can get all your teams aligned.

Here in the 21st century, digitally-driven businesses work “round the clock,” buzzing with the energy of innovation while supplying the world with an endless flow of goods and services delivered just in time thanks to a sophisticated, interconnected global supply chain. Then a printer goes offline and it all stops.

If you’re responsible for helping keep a business (or business unit) running, you need to be able to see what’s happening in every node of your network, with every machine and server, so you can fix that printer (or server, or machine) before it breaks.

Incomplete and fragmented visibility leads to long investigations and resolutions, all while the clock is ticking — and the phone is probably ringing. (Or beeping. Or playing “La Vida Loca.” Whatever phones do now.)

Solution: Service Monitoring

A modern service monitoring solution uses predictive intelligence to give you full-stack visibility of your critical services to protect performance and availability. It helps you to prevent costly outages by predicting and resolving issues before they impact customers. With continuous full-stack visibility, you can prevent outages, get an instant dashboard view of the health of your systems and resolve issues faster to prevent downtime for your customers.

08

“We’ve had enough of this sh__”

It’s hard to maintain team morale when your team is overworked.

Nobody can be expected to plan, meet goals and innovate if everybody is wandering around muttering. And free pizza can only do so much. You want to work with a team that is motivated and engaged. Your team wants to be motivated and engaged. How do you clear a path for them?

Automation is one of the most effective ways to take the repetitive tasks off your IT team’s plate and make sure they have the time, energy and motivation to handle the most challenging issues, the ones that can have a real impact on your revenue, customer satisfaction and reputation.

Data is the fuel that drives machine learning and machine learning is the tool that drives automation. The march of AI-driven solutions is definitely a quick step, double-time kind of march. If you haven’t taken a look at what data-driven automation can do to help your IT team in a while, you need to give it another look.

Solution: Predictive Analytics

Predictive analytics is the practice of applying mathematical models to large amounts of data to identify patterns of previous behavior and to predict future outcomes. Like going back to the future, but better. The combination of data mining, machine learning and statistical algorithms provides the “predictive” element, allowing predictive analytics tools to go beyond simple correlation.

The bad news is you can’t just go out and buy “predictive analytics.” The good news is that you can buy data-driven IT automation built on predictive analytics. (We’ve got it, in case that was too subtle.)

The bottom line: Turn data into doing.

The data revolution isn't coming anymore. It's here, it bought a house on your street and it waves at you every morning on its way to work. It's time you brought it a casserole.

At Splunk, we not only have the solutions you need to take control of your data, we also have the confidence of 92 of the Fortune 100 and the customer success stories to back it up. To find out more, visit splunk.com.

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