9 Key Practices of **Observability Leaders**

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There's a lot that can go wrong with increasingly complex, hybrid IT systems, and being able to understand and remediate problems is essential. But like exercise, there's a big range between the occasional brisk walk and running a triathlon. So we set out to answer two questions: What does a strong, high-level observability practice look like, and does it actually deliver meaningful results?

The second question can be answered in a single word: Yes.

But here are some more words: Established leaders with the best observability practices — building on traditional monitoring and extending it into multicloud environments — see the following results, compared to beginners with the most nascent or incomplete practices.

Leaders are:

- **2.9 times** more likely to enjoy better visibility into application performance.
- Almost **twice** as likely to have better visibility into public cloud infrastructure.
- **2.3 times** more likely to experience better visibility into security posture.
- **Twice** as likely to benefit from better visibility into on-premises infrastructure.
- **2.4 times** likelier to have a tighter grasp on applications, down to the code level.
- **2.6 times** likelier to have a fuller view of containers (including orchestration).
- **6.1 times** likelier to have accelerated root cause identification.

And overall, observability leaders are way more successful at launching innovative products/services, having developed 60% more new products in the last 12 months.

To determine the characteristics — and benefits — of a strong observability practice for organizations that weren't born that way, Splunk and researchers at Enterprise Strategy Group surveyed 525 large and midsized, well-established organizations worldwide.

Drawing from the research, here are the key practices of observability leaders.

2.3 times more likely to experience better visibility into security posture.

01

Be proactive

Better observability should not trail the increase in hybrid/multicloud complexity — it should get there first. When respondents disclosed the impact of service-disrupting issues, they were severe:

- **68%** of all respondents say issues have ratcheted up inter-team tensions.
- **53%** of all respondents say app issues have resulted in customer or revenue loss.

The longer an organization has had an observability initiative, the less likely they are to report negative events/effects. It pays to get ahead of your visibility challenges.

02

Get started right away

Leaders have been prioritizing observability for more than two years. It takes time to get a strong practice in place. If you're just getting started on your observability journey, you may be considering the best way to move forward. Look at your IT road map and make sure that application performance monitoring (APM) is in place when you expand your infrastructure or debut new applications.

03

Prioritize data collection and correlation

You want to be able to work with every metric, log and trace your organization produces. Break down silos and assemble the tools that give you visibility into all your data and sources with open, flexible instrumentation.

04

Elevate your analysis

Identifying relevant data and correlating it allows you to pull conclusions and take action. And a significant byproduct of proper correlation and analysis is that you can get disparate teams on the same proverbial page. Having a common set of facts assembled and analyzed by a common set of tools minimizes finger-pointing and more quickly points everyone to the best response to an incident or concern. And being able to understand (and therefore resolve) issues as they happen is essential to customer satisfaction and the bottom line.

05

Rationalize your vendor list

The observability market is moving toward more comprehensive tools that will eventually crystalize into a full platform approach. In the meantime, organizations have to figure out which tools give them the best visibility and are most interoperable to reduce the time and cognitive overhead of maintaining vast suites of point solutions.

a. **Open source tools.** Many organizations start with open source tools, especially organizations that used to think of themselves as not digital, until realizing that they (like everyone) have to be. As their observability initiatives, actual businesses or missions grow, they tend to discover that their open source solutions don't scale with their needs. Make sure that your tools, whether open source or commercial, meet you where you are today, and where you're heading.

b. **Architecture-agnostic tools.** Most significantly, look to move away from reliance on tools provided by cloud service providers that don't provide visibility across your full, hybrid, multicloud ecosystem. (Check into OpenTelemetry, for starters. Open source instrumentation lets organizations avoid being locked into any one vendor, and improves ROI across the board.) A cloud service provider's observability tools can give you some insight into how an app is behaving, but they're generally not designed to solve for inherently flawed code, for instance. And tools that let you see across all cloud infrastructure means you're less locked in to any one cloud provider's offerings. Flexibility is an essential benefit of cloud, so don't let your observability practice undermine it.

c. **Don't surrender functionality in favor of simplicity.** Modern infrastructure is very complex, and especially when starting an observability practice, or adopting a new tool, we want simple, clear answers. Successful teams turn to tools that help navigate the complexity rather than boil it down so much they lose insight into the why of a problem, and therefore lose the ability to take effective action.

d. **Consolidate your tool set.** Traditional, disjointed monitoring tools can't provide the speed, scale and analytics capabilities needed to support real-time visibility, smart alerting and rapid troubleshooting. Moving from point monitoring tools to modern APM enables you to pinpoint when issues occur and isolate them to particular parts of the stack.

06

Look to AI/ML to eliminate human error and scale effectively

All leaders, and 90% of intermediate respondents, say they employ tools that use ML. Tools that employ machine learning to identify repeated patterns from unfathomable volumes of data provide better evidence for how to triage and remediate problems. ML also feeds better automation, letting action take place faster than human intervention can manage.

07

Automate CI/CD

Continuous integration and continuous deployment (or delivery) is a hallmark of DevOps practice. It requires automation to accelerate your ability to release new software and reduce the lag time between business decisions and the solutions that execute them. At the same time, strong observability practices allow organizations to accelerate iteration and deployment with much greater confidence — and success.

And DevOps *should* be your hallmark. While observability is an absolute necessity in a cloud world (you have to know what's going on), DevOps practices are arguably optional: You don't have to establish tighter collaboration, faster iteration and a unified focus on the end product. But it's awfully nice. Doubling down on DevOps practices and culture will complement and kickstart your observability initiative.

08

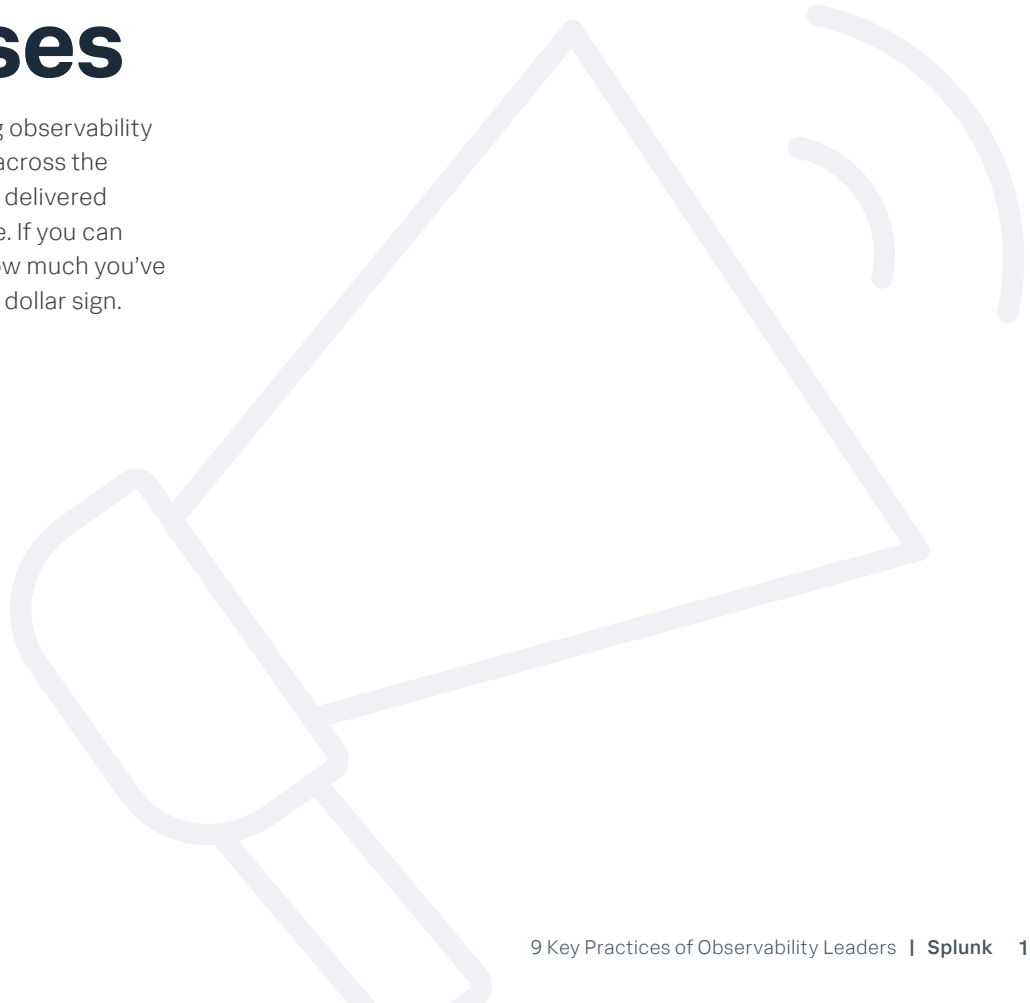
Train devs, don’t send them shopping

Our research shows that, despite DevOps principles that give developers more responsibility for how code performs in production, devs have less insight into reliability issues that fall mainly on operations teams, and they use their observability tools markedly less often than ops teams think they do. They also have less understanding of the role of security in observability and observability tooling. All together, that means that orgs must work to have devs on board as active participants in observability initiatives, but ultimate responsibility will usually fall to the ops team.

09

Sing your own praises

DevOps practices make an organization more nimble and innovative. Strong observability practices further empower that innovation, and they make IT more reliable across the board. It's hard to celebrate disasters not happening, but the improvements delivered by your observability initiative should be measured and translated into value. If you can measure the cost of a minute of service downtime, and you can measure how much you've reduced downtime, you can communicate your success as a number with a dollar sign. Especially to the people controlling your budget.



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