

The State of Observability 2021

Global research reveals IT leaders' early investments in observability improve performance, customer experiences — and the bottom line.

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Observability Delivers Results

Observability is obviously a good thing. 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.

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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 as likely to enjoy better visibility into application performance.**
- **Almost twice as likely to have better visibility into public cloud infrastructure.**
- **2.3 times as 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 (43% of leaders versus 7% of beginners).**



Observability is not a cutting-edge differentiator; it's a basic ingredient of success.

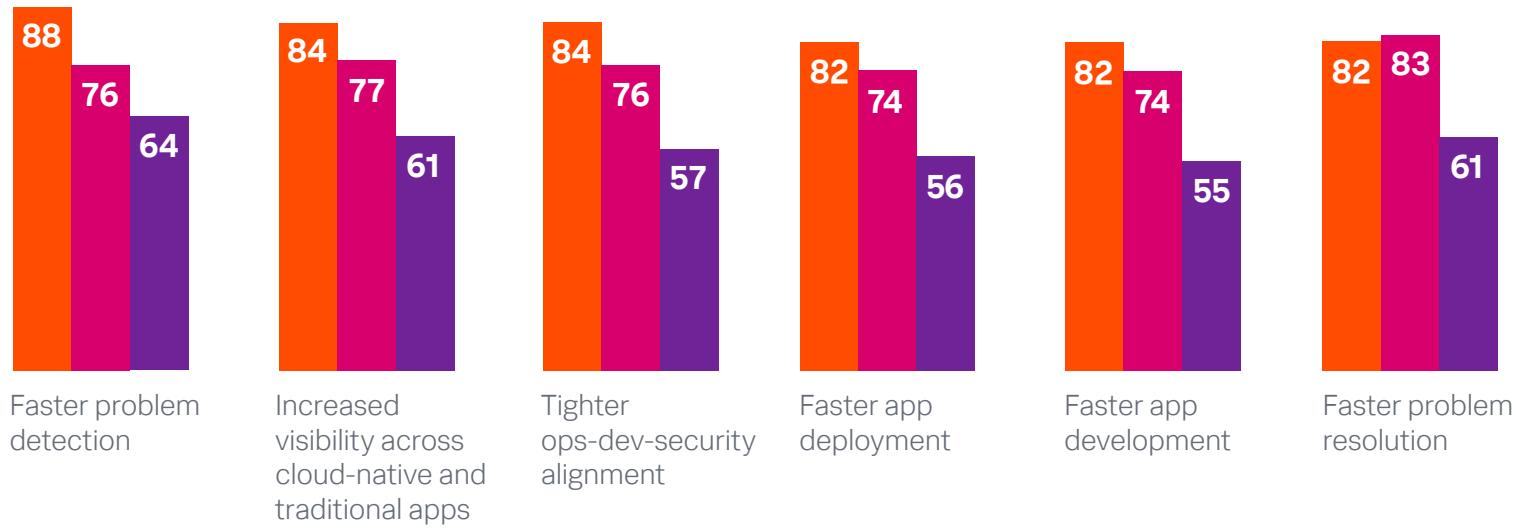
Generally, respondents say that their observability efforts have accelerated problem detection and resolution, increased hybrid visibility, tightened alignment between development, security and operations teams, and accelerated app dev and deployment. The payoffs have been significant:

- 70% of observability leaders say they have “excellent” visibility into their org’s security posture, versus only 31% of beginners.
- 48% of leaders say they’re “completely confident” they can meet application availability/performance commitments, versus only 10% of beginners.
- Leaders innovate at a faster rate: 45% report launching eight or more new products/revenue streams in the last year, compared with 15% of beginners.

Maturity Improves Observability Benefits

Leaders consistently see benefits at a rate of about 1.3x

% Leader
% Intermediate
% Beginner



Executive Highlights

Observability delivers tangible, essential results.

Top-level observability practices lead to powerful results. High maturity is correlated to:

- Much greater visibility across hybrid, multicloud infrastructures, resources and performance areas.
- Accelerated root cause identification, meaning complex, service-crashing crises are fixed much more quickly, or averted entirely.
- Faster digital transformation, with more successful results.
- Exploding innovation, with leaders reporting 60% more new services, products and revenue streams than organizations with beginner-level observability.

Observability gaps have real consequences. Along with a lot of internal friction, a significant percentage of respondents say they have suffered material consequences for service failures:

- Lower customer satisfaction (45%)
- Loss of revenue (37%)
- Loss of reputation (36%)
- Loss of customers (30%)

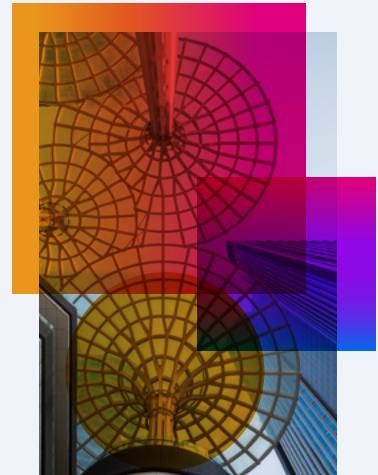


Challenges include technology, infrastructure complexity, people/culture and executive support.

- The most commonly cited challenge is technology, while the single biggest problem is complexity: an inability to correlate data from multiple sources quickly enough.

Key recommendations. (see page 17)

- Put in the time and effort. Observability success is nurtured over time, not plugged in at the end.
- Prioritize data collection and correlation. It's the biggest challenge, and the foundation of success.
- Rationalize your vendor list: Identify the tools that give you the broadest reach, the deepest insights and the most flexibility.
- AI/ML and automation help you achieve scale and velocity.
- Double down on DevOps. Observability tools work best with the right processes and culture.



Observability is essential.

- Every organization is a digital org now. Observability is not a cutting-edge differentiator; it's a core competency, a basic ingredient of success.



What Defines an Observability Leader?

Cloud-native startups have observability in mind from day one. Cloud-native by default and DevOps by design, they figure out observability before they've figured out the espresso machine. For established organizations, it's all one big transition: from legacy to hybrid multicloud, from waterfall to agile and on toward DevOps.

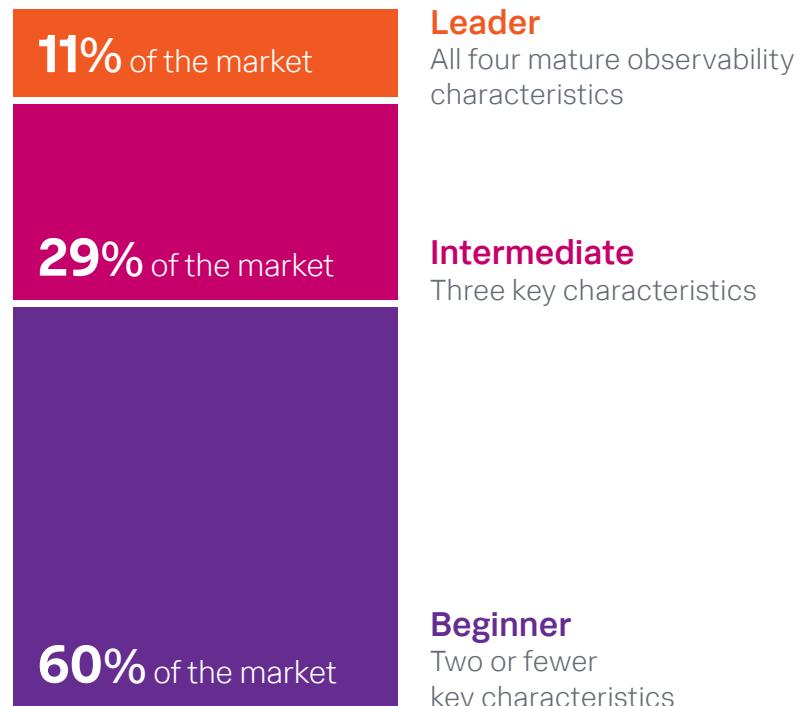
To determine the characteristics — and benefits — of a strong observability practice for orgs that weren't born that way, Splunk and researchers at Enterprise Strategy Group surveyed 525 large and midsize, well-established organizations worldwide ([see appendix for methodology](#)). Working with ops teams and developers, senior leaders and the hands-on experts, we measured four factors to judge the overall maturity of observability:

- **Experience:** length of time maintaining an observability practice
 - **Leadership** was defined as 24 or more months. Overall, 45% of respondents have achieved this. Another large segment (42%) have logged 12-23 months.
- **Data correlation:** how much data can be correlated across IT systems
 - **Leadership** was defined as “extensive,” the ability to correlate all or almost all of an organization’s data. While 33% of all respondents have achieved this, the largest group, 51%, say they have a moderate ability to correlate some of their data.
- **Vendor rationalization:** progress from scattershot tooling toward a platform approach
 - **Leadership** was defined as “somewhat or significantly consolidating vendors,” and 47% of all respondents fit this definition. The rest are split fairly evenly between “no change in number of vendors” (28%) and “somewhat or significantly increasing vendors” (25%).
- **AI/ML:** use of AI/ML within observability tools
 - **Leadership** was defined as currently using such tools, whether to a limited or extensive degree, and 52% of respondents checked that box. Another 33% say they’re in the process of deploying AI/ML tools for observability, and 13% of all respondents say they’re not deploying such tools or planning to do so.

We found that respondents fall into three distinct groups: beginners, who’ve adopted up to two of the four observability characteristics; intermediate practitioners, who have adopted any three; and leaders, who have adopted all four observability characteristics.

Only 11% have reached the leadership level in all four categories. Looking at the respondents overall, we saw the following breakdowns for each parameter:

Organizations Fall Into Three Observability Maturity Levels



Our research defined leaders as organizations that have achieved excellence in all four categories. Intermediate orgs possess three of the four, and we found that most common was the use of AI/ML (90%), followed by vendor consolidation (59%), strong data correlation capabilities (55%) and more than two years' experience in observability (53%). Beginner orgs had two or fewer of the four success factors, ranked, in descending order: experience (38%), vendor consolidation (32%), AI/ML (25%) and data correlation (10%).

We suspect that the large gap in achievements and benefits between beginners and intermediates is because beginners are still in the process of establishing their observability practice and building their ability to correlate all or most data. And the smaller differences between intermediates and leaders suggest

that establishing a solid practice by the intermediate stage then allows orgs to refine processes and grow the skill sets that define leadership-level success.

Additionally, vendor rationalization is a process. Our research found that while every organization in the leader tier is actively reducing the number of tools in its arsenal, leaders are still the ones with the most tools on hand. On average, leaders have 15 monitoring tools in use, while intermediate organizations have 13 and beginners have 10. It seems that experimentation is part of the pursuit of excellence, followed by a sharpened focus on what brings real value across a complex, modern infrastructure.

Intermediate orgs had any three of the four success factors. Most common: AI/ML. Beginners, with two or fewer factors, were least likely to have mastered widespread data correlation.

It pays to be a leader

Having identified the attributes of a leading level of observability practice, the researchers dug into the primary benefits.

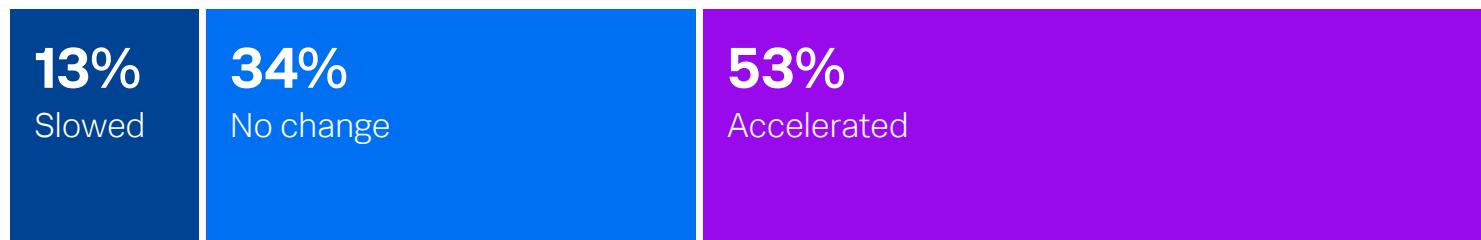
In summary:

- High maturity correlates to much greater visibility across resources and performance areas.
- High-maturity organizations are also rapidly accelerating root cause identification for application issues.
- High-maturity organizations more often report that observability solutions are directly improving performance management.
- High-maturity organizations drive more innovation from their dev teams and tend to be digital transformation leaders.

That last bullet is notable. Digital transformation, or DX, has been underway for about a quarter-century, and has been an often vague buzzword for much of that time. But in the past 18 months, the already rapid rate of digital transformation has significantly accelerated. In the face of the COVID-19 pandemic, organizations began moving much more quickly to the cloud, and adopted data-driven digital technologies at a faster pace than ever.

Most Orgs Are Accelerating Digital Transformation

Only 13% have slowed down during the pandemic

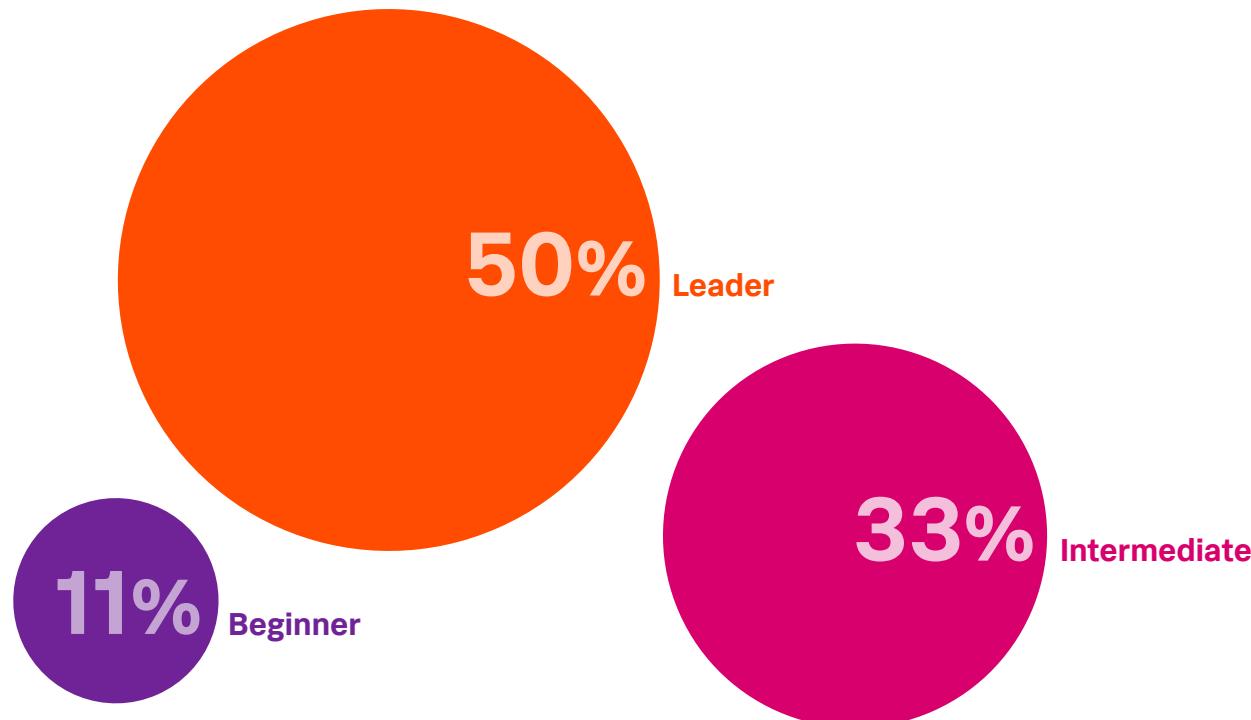


Call it a side effect of the sudden shift to remote work. But also call it a consequence of massively disrupted supply chains and the sudden shift in how we live, shop and communicate. Many businesses had to quickly pivot, and those that could mainly relied on digital technologies. Orgs with a mature observability practice saw fewer major problems as they made those rapid adaptations.

Across the board, 53% of respondents say that the pandemic has accelerated their rate of digital transformation. But look at our leader group, and 70% say as much, versus only 45% of beginners. What's not clear from the data is whether that gap indicates that beginners in observability are also naturally cautious about new technology in general, or whether orgs with immature observability practices were simply less capable of meeting the sudden need for speed.

Observability Leaders See DX Success

Leaders are 4.5x as likely to report “high success” with digital transformation initiatives



Overcoming Observability Obstacles



Observability is an evolution of monitoring. Pretty much anyone with a cloud instance has at least rudimentary monitoring capabilities. The question is, as the cloud spreads across your increasingly hybrid infrastructure, can your monitoring keep up with that complexity?

Even as they progress along their observability journeys, respondents have experienced the negative effects of observability failures. Fallout from service-impacting issues has included:

- **Friction between observability stakeholders across development and operations teams and IT leaders (cited by 38% of respondents).**
- **Increased outsourcing of observability (34%).**
- **Friction between observability stakeholders and LOB leaders (32%).**
- **Increased turnover among observability stakeholders (32%).**
- **Friction between observability stakeholders and app developers (31%).**

On that last bullet, of course in a DevOps environment, developers should be seen as observability stakeholders. But looking at the data closely, we saw clear differences in opinion between developers and IT operations teams about how integral and integrated devs really are.

Asked how often a typical developer uses any observability tool, 51% of ITOps teams assumed daily or multiple times per day, but only 32% of developers agreed. And while only 15% of ops teams assumed that devs use observability tools weekly or less often, a more robust 35% of developers said as much. Clearly ops teams think observability tools are more essential to a developer's day than the devs themselves.

This disconnection was borne out in another question: Asked which groups are influential in picking and purchasing observability tools at their organization, there were clear differences of opinion:

- **65% of developers think devs have influence, versus 46% of ITOps teams.**
- **57% of devs think ops teams have influence, versus 77% of ops.**
- **Also notable: the split on whether security teams have influence is 38% of developers in agreement, versus 54% of ops.**

In addition to internal frictions, respondents say the hard consequences of service-impacting issues over the past 12-24 months include:

- **Lower customer satisfaction (acknowledged by 45%)**
- **Loss of revenue (37%)**
- **Reputation loss (36%)**
- **Loss of customers (30%)**

23% of respondents say they have trouble correlating data from multiple sources in a timely fashion.
10% — the highest figure — say it was their single biggest observability problem, from a list of 18 challenges.

While these negative consequences are cited by respondents across our maturity curve, we see fewer such reports from those with the longest-established observability practices. There is definite value to moving up the curve.

What makes observability hard

Given a long list of difficulties in an observability practice — from tool fragmentation to skill shortages to lack of executive support — respondents chose a wide mix, identifying no one monster challenge. But when we broke these blockers into categories, we saw patterns emerge.

In order of intensity, observability challenges break down into four categories.

1. Technology. Eighty-six percent of respondents cite difficulties related to tech, including inadequate legacy tools, lack of platform options, concern about open source tools and tool fragmentation. This is not surprising, because tools and tech are among the biggest initial challenges to standing up an observability practice, and fully 60% of respondents fall into the beginner group. Asked to pick just the one most difficult challenge, 41% of respondents chose a tech struggle.

2. Complexity. For 56% of respondents, problems go beyond tooling and into the environments they're trying to observe. These challenges include silos, too many data sources, scalability problems, and difficulties around distributed environments. In other words, once you get the tooling straight, it's still a lot of work to get your arms, metaphorically speaking, around a complex hybrid infrastructure and the data sources that provide visibility into system performance. A complexity issue is the number-one challenge for 25% of respondents.

3. People and culture. Less than half of respondents — 46% — identify challenges related to colleagues and culture (such as lack of necessary skills or successful team collaboration). People problems may tend to reveal themselves after the purely technological challenges are surmounted. It's one thing to have the tools, it's another thing to use them effectively across the organization. Observability often flourishes in DevOps orgs, though, and people and processes are central to DevOps culture, perhaps minimizing the human challenges of observability initiatives. A "people issue" was the single biggest difficulty for 18% of all respondents.

Observability Challenges

Percentage of respondents identifying challenges from four buckets:

86%

56%

46%

33%

Technology

Complexity

People/culture

Internal support

4. Internal support. It is encouraging that only a third of respondents cite such issues as insufficient funding (cited by 20%) or a lack of executive support (cited by only 17%). On the former, organizations' rush to accelerate cloud migration and broader digital transformation efforts means that investment in observability tools is there. It also means that although "observability" may sound like a brand-new buzzword to people who aren't immersed daily in cloud and DevOps conversations, executives are quick to understand that observability is essential to maintaining the digital services that define business success. Internal support was the top obstacle for only 10% of respondents.

Cloud trends demand observability

We can't say it often enough, so we'll say it again: Cloud complexity will only increase, and therefore so will the need for strong observability practices.

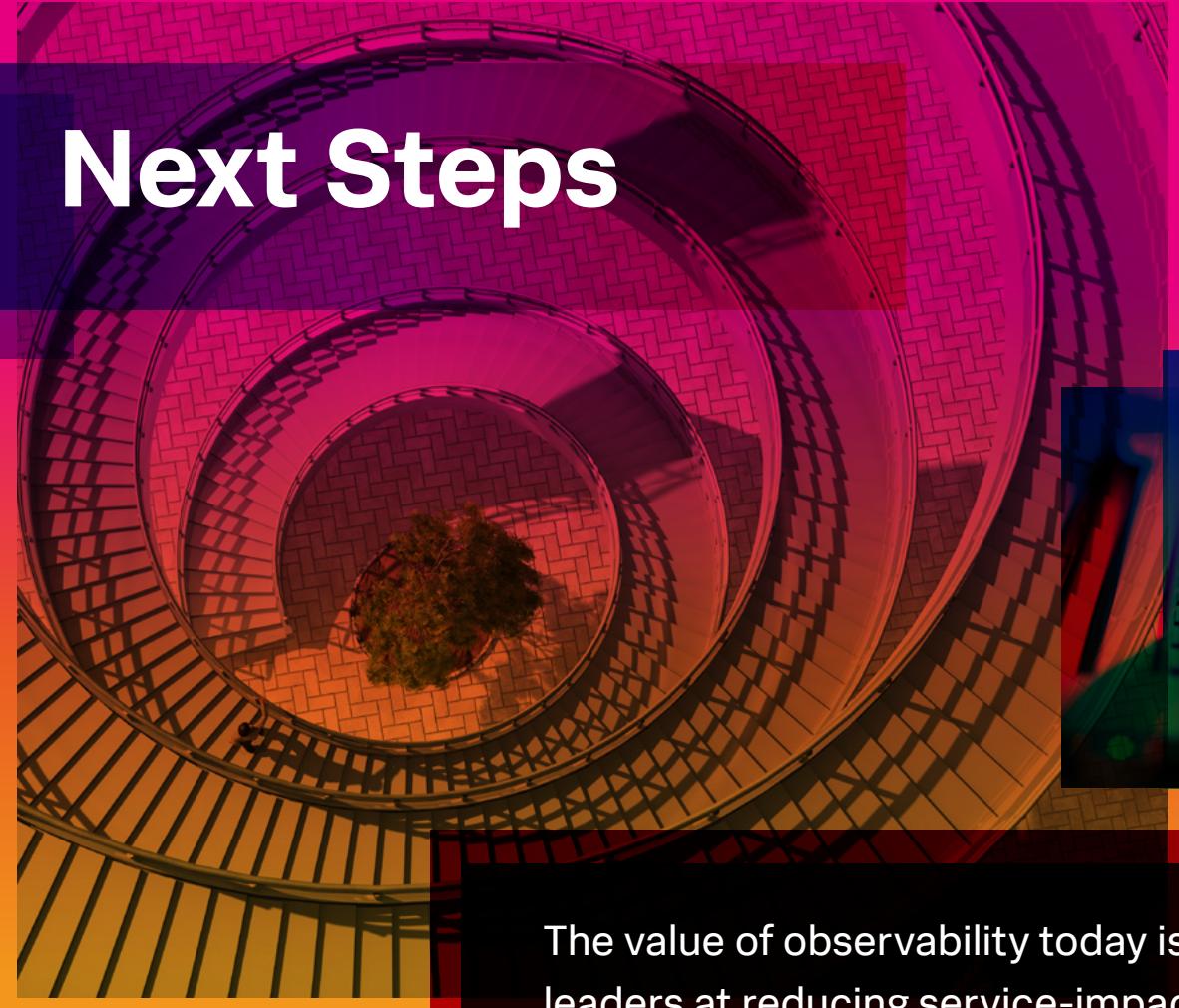
Looking back, there was something manageable about those cumbersome, on-premises monolith applications. Today, the equivalent application might consist of two dozen microservices interacting across two or three public clouds and your in-house architecture. That's a lot of places to look for one surprise point of failure.

The research bore out the trend toward cloud complexity:

- **Most organizations (68%) deploy cloud-native apps in a complex combination of public cloud and private data centers/edge locations.**
- **On average, respondents say their cloud-native apps extend across 2.25 public cloud environments.**
- **The most commonly used observability tools are those provided by the public cloud providers — which can't see across clouds, making them inadequate for that 2.25-cloud reality.**
- **Only 19% of organizations rely entirely on homegrown or third-party observability tools, while 53% say they use only cloud provider's native tools; 27% use a mix.**
- **Cloud-native apps are 35% of internally developed applications (and rising) and on-premises, containerized applications represent another 29%.**

The combination of rising cloud complexity and high reliance on limited, provider-specific tools means that many organizations will have to play catch-up when they realize their current observability regime doesn't give them enough of the where, the why, and the now what when failures occur.

Next Steps



The value of observability today is proved by the success of leaders at reducing service-impacting incidents, improving internal processes and increasing innovation. As traditional and enterprise-scale organizations work to catch up to the cloud-native startups, they should focus on the four factors that define observability leadership.

Key recommendations

Drawing from the research, we put together the following lessons from leaders. The first lesson is the one we just shared.

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 data shows that the longer an organization has had an observability initiative, the less likely it is to report negative events/effects. It pays to get ahead of your visibility challenges.

1. Get started right away.

Leaders have been prioritizing observability for more than two years. It takes time to get a strong practice in place. And once you do, you're not done. Look at your IT roadmap and make sure that observability is in place when you expand your infrastructure or debut new applications.

2. Prioritize data collection and correlation.

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

3. 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.

4. 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.

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, or their actual businesses, 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.

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.) Cloud service providers' 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 mean 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.

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 you lose insight into the why of a problem, and therefore lose the ability to take effective action.

Architecture-Agnostic Is a High Priority

87% of respondents say it's important that observability solutions work regardless of architecture



3% Not very important

5. 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.

6. 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.

■ **96% of leaders use CI/CD automation tools, versus 88% of intermediates and only 70% of beginners.**

7. Train devs, but 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. Altogether, that means that orgs must work to have devs onboard as active participants in observability initiatives, but ultimate responsibility will usually fall to the ops team.

8. 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.

Body armor for your business

One of our engineers calls observability “body armor for your business.” In an era of hyper-accelerated digital transformation, no organization can afford to take hits to its IT performance. Those problems bottleneck you on the back end and shut down your business on the front end.

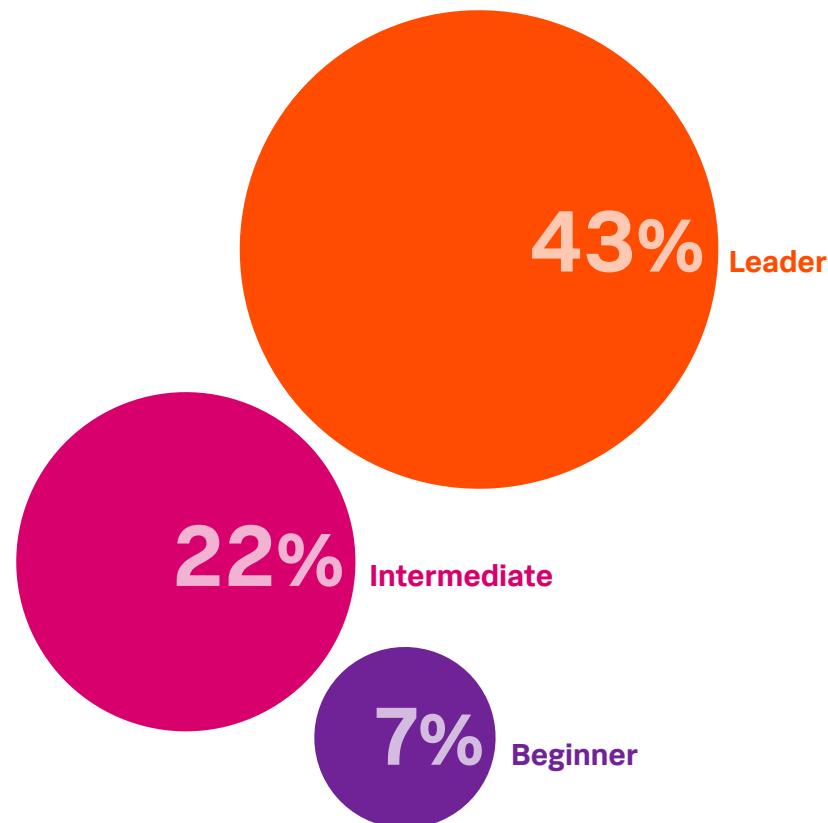
Just as using the cloud has moved from a novel differentiator and competitive advantage to a baseline for any modern organization, a strong observability practice is elemental to success. Real-time analysis allows you to understand performance disruption or degradation as soon as it happens, so that you can remediate immediately, minimizing or preventing costly downtime.

For people outside the ITOps arena, or who haven’t been immersed in cloud-native startup culture, observability can appear to be a new phenomenon. It’s not. It is an evolution of the longstanding practice of monitoring IT systems — but advanced into the cloud era. For the most part, a newly formed, cloud-first organization builds its observability practice from day one. It’s a matter of leveraging new tools and better methods in response to the new cloud paradigm.

For traditional organizations evolving into increasingly advanced hybrid architectures, there may be some catching up to do. But above all, catching up is not optional. An organization that can’t understand system performance in real time to overcome service disruptions cannot expect to succeed in the Data Age.

Observability Leaders Solve Problems Faster in a Digital Age

Leaders are 6.1x as likely to have accelerated root cause identification



Industry-specific highlights

Communications/media

Communications companies reported tightened alignment between ITOps, developers and security teams at a much higher rate than all other industries (84% on average, compared with 66% in the aggregate).

Communications companies reported friction between observability teams and IT teams at the highest rate (56%), versus a cross-industry average of 38%.

Communications companies were the most likely to report that all cloud-native apps reside in public clouds (35%), versus a cross-industry average of 18%.

Communications companies were the most likely to report using CSP-provided tools (71%), versus a cross-industry average of 53%.

Financial services

Financial firms were the least likely to report increased visibility across cloud-native and traditional applications (59%), a significantly lower rate than manufacturers (74%), retailers (79%) and healthcare organizations (75%). The cross-industry average was 68%.

Financial firms were the most likely to report that learning to use observability tools was an issue (24%) — a much higher rate than among tech firms (10%) and well above the cross-industry percentage of 16%.

Financial firms were the least likely to say having an observability solution that can cover both cloud-native and traditional application architectures is very important (26%). This was a much lower rate than among communications companies (47%), retailers (45%) and the cross-industry average (34%).

Healthcare

Just 8% of healthcare organizations expressed concerns about open-source software, versus a cross-industry average of 19%.

Healthcare organizations were among the most likely to report that all cloud-native architected apps run in an on-premises environment (20%) — a much higher percentage than manufacturers (6%) and higher than the aggregated data (13%).

Healthcare organizations were among the most likely to have adopted a continuous integration/continuous deployment pipeline automation tool (86%). This was much higher than in finance (72%), manufacturing (73%) and the public sector (70%). Cross-industry average: 78%.

Healthcare organizations were among the most likely to say the ability to correlate data from multiple sources in a timely fashion was their single biggest observability challenge (18%), much more than finance (3%) or retailers (4%). The cross-industry average was 10%.

Manufacturers

Manufacturers (76%) were much more likely than financial firms (62%), tech companies (60%) and public sector organizations (58%) to have reported accelerated problem resolution. Manufacturers also reported strong success (76%).

Manufacturers were the most likely to complain of a lack of funding (30%), a much higher rate than finance firms (15%) and healthcare organizations (13%). The cross-industry average was 20%.

Manufacturers (38%) were also much more likely to report struggles with legacy tools for cloud-native environments relative to tech companies (22%), public sector agencies (18%) and healthcare organizations (22%).

Public sector

Relative to other verticals, public sector organizations expressed much lower interest in AI/ML; 33% expressed a lack of interest, a much higher proportion than finance (11%), communications (2%), tech (15%), manufacturing (14%), retail (6%) and healthcare (12%).

Public sector organizations were the least likely of all industries to report that their overall application visibility was excellent (35%), versus a cross-industry average of 41%. However, they were the most likely to report that visibility into their on-premises infrastructure was excellent (50%, compared with a cross-industry average of 42%).

Public sector organizations were the least likely to have adopted a continuous integration/continuous deployment pipeline automation tool (70%, versus a cross-industry average of 78%).

Public sector organizations were the most likely to report that reducing the time to implement observability tools would lead to a major improvement in their overall observability posture (65%). By comparison, tech (42%), manufacturers (40%), healthcare organizations (36%) and the cross-industry average (45%) were notably lower.

Retail

Retailers were most likely to cite a lack of executive support (28%), a much higher rate than finance firms (14%) and manufacturers (13%), and above the cross-industry average of 17%.

Retailers reported the termination of observability stakeholders most often (34%), versus a cross-industry average of 21%.

Retailers led on data correlation; 45% of retail respondents reported that they can correlate all or almost all collected data. Though followed closely by communications/media organizations (42%), they were ahead of the cross-industry average (33%), and well ahead of manufacturers (25%).

Technology

Among companies using CI/CD pipeline tools, tech companies were the most likely to be early adopters, using their tools for more than 36 months (20%). This was significantly higher than finance (7%), communications (5%), healthcare (5%) and the cross-industry average (11%).

Tech firms were the most likely to report that service-impacting issues among their applications had led to customer loss (38%). The cross-industry average was 30%.

Tech firms were the most likely to say that cultural resistance from legacy environment teams was a gating factor in observability progress 23% — a significantly higher percentage than healthcare organizations (11%) and more than the cross-industry average (17%).

Regional highlights

Asia Pacific (APAC)

APAC organizations were much more likely to report slow or non-delivery of alerts (27%, versus 16% for both North American and European organizations).

At 87%, APAC organizations have most often adopted CI/CD tools — compared with 73% for North American organizations and 78% in Western Europe.

Among companies using continuous integration/continuous deployment pipeline tools, those in APAC were the most likely to be early adopters, having used their tools for more than 36 months (17%, versus 9% in North America and 8% in Western Europe).

APAC organizations were the most likely to report needing improvement in their visibility of on-premises infrastructure (22%, versus 13% in North America and 12% in Western Europe).

North America

Organizations in Canada and the United States tended to lead on observability maturity: 14% were leaders, versus 8% in both Western Europe and APAC.

North American organizations were the most likely to be completely/mostly confident in their ability to meet application availability and performance commitments (82%, versus 75% in Western Europe and 63% in APAC).

North American organizations were the most likely to say that their code-level app visibility was excellent (47%, versus 38% in Western Europe and 32% in APAC). They also were likeliest to report excellent IaaS visibility (49%, versus 47% in Western Europe and 35% in APAC).

North American organizations were the most likely to report their digital transformation initiatives have been very successful (31%, versus 20% in Western Europe and 13% in APAC).

Western Europe

European organizations were much less likely to report a lack of funding (14%) than North American (23%) or APAC (24%) organizations.

Western European organizations were also the least likely to report that a lack of observability skills is holding them back (15%, versus 21% in NA and 28% in APAC).

Western European organizations were the most likely to report using a mix of CSP-native, third-party and home-grown tools to maintain observability over their public-cloud-resident applications (34%, versus 30% in APAC and 22% in North America).

Western European organizations were most likely to report having accelerated problem resolution via observability adoption (75%, versus 72% in APAC and 65% in North America).

Methodology and demography

The survey was conducted from mid-February through mid-March 2021 by the Enterprise Strategy Group. The 525 respondents were drawn from nine global regions, from organizations with 500+ employees and an existing observability practice.

Respondents consisted of:

- ITOps managers, IT managers, directors and senior executives and general IT staff responsible for supporting internal application development teams (62%).
- Developers, architects, team leads, and executives responsible for supporting internal application development (38%).

Regional demographics

- North America (U.S., Canada): 46%
- Western Europe (France, Germany, UK): 30%
- Asia Pacific (Australia, Japan, New Zealand, Singapore): 23%

Splunk Observability Cloud

Splunk Infrastructure Monitoring

Splunk Infrastructure Monitoring is a purpose-built metrics platform to address real-time cloud monitoring requirements at scale. High-resolution, easy-to-use dashboards and charts let you interact with all of your data in real time — enabling deeper troubleshooting and root cause analysis. Predict on dynamic thresholds, multiple conditions and complex rules to dramatically reduce MTTR.

[Learn more.](#)

Splunk APM

Splunk APM is the most advanced application performance monitoring and troubleshooting solution for cloud-native, microservices-based applications. With open and flexible instrumentation, NoSample™ full-fidelity tracing, a highly scalable streaming architecture and powerful AI-driven directed troubleshooting, DevOps teams can quickly and easily find the root cause of any issue. [Learn more.](#)

Splunk Log Observer

Investigate and explore logs in context without learning a query language.

Splunk Log Observer is designed to enable DevOps, SRE and platform teams to understand the why behind application and cloud infrastructure behavior. Investigations are intuitive, require no additional coding and empower teams to readily combine real-time log data with metrics and traces to gain immediate insights. [Learn more.](#)

Splunk RUM

Teams fix customer-facing issues faster with end-to-end visibility of full-fidelity data that pinpoints problems from web browsers through backend services. Regardless of framework, multipage or single-page application, Splunk RUM helps future-proof your user experience data.

[Learn more.](#)

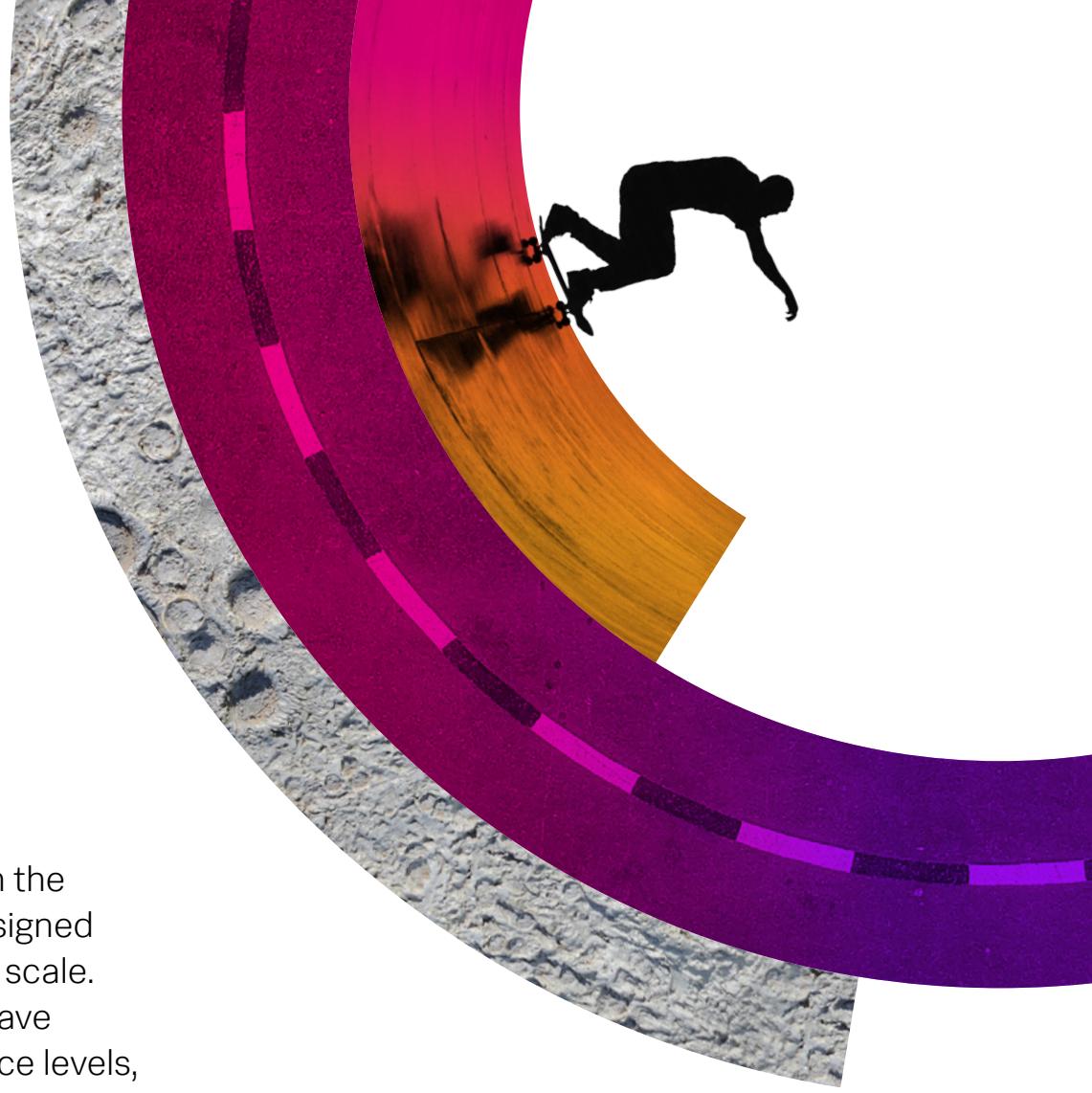
Splunk Synthetic Monitoring

Deliver better user experiences with the most advanced synthetic monitoring in any observability suite. Troubleshoot issues across your entire architecture. Measure API and service uptime alongside the health of backend services and underlying infrastructure. Proactively improve customer experience with API and browser monitoring and web optimization. [Learn more.](#)

Splunk On-Call

Make on-call suck less with intelligent and automated incident response and collaboration. Splunk On-Call automates incident management, reducing alert fatigue and increasing uptime. Deliver the right alerts to the right people, reducing time to acknowledge to resolve incidents faster. [Learn more.](#)





Splunk Inc. (NASDAQ: SPLK) turns data into doing with the Data-to-Everything Platform. Splunk technology is designed to investigate, monitor, analyze and act on data at any scale. Our powerful platform and unique approach to data have empowered companies to mitigate risk, improve service levels, reduce operations costs, enhance DevOps collaboration and create new product and service offerings.

[Learn More](#)

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