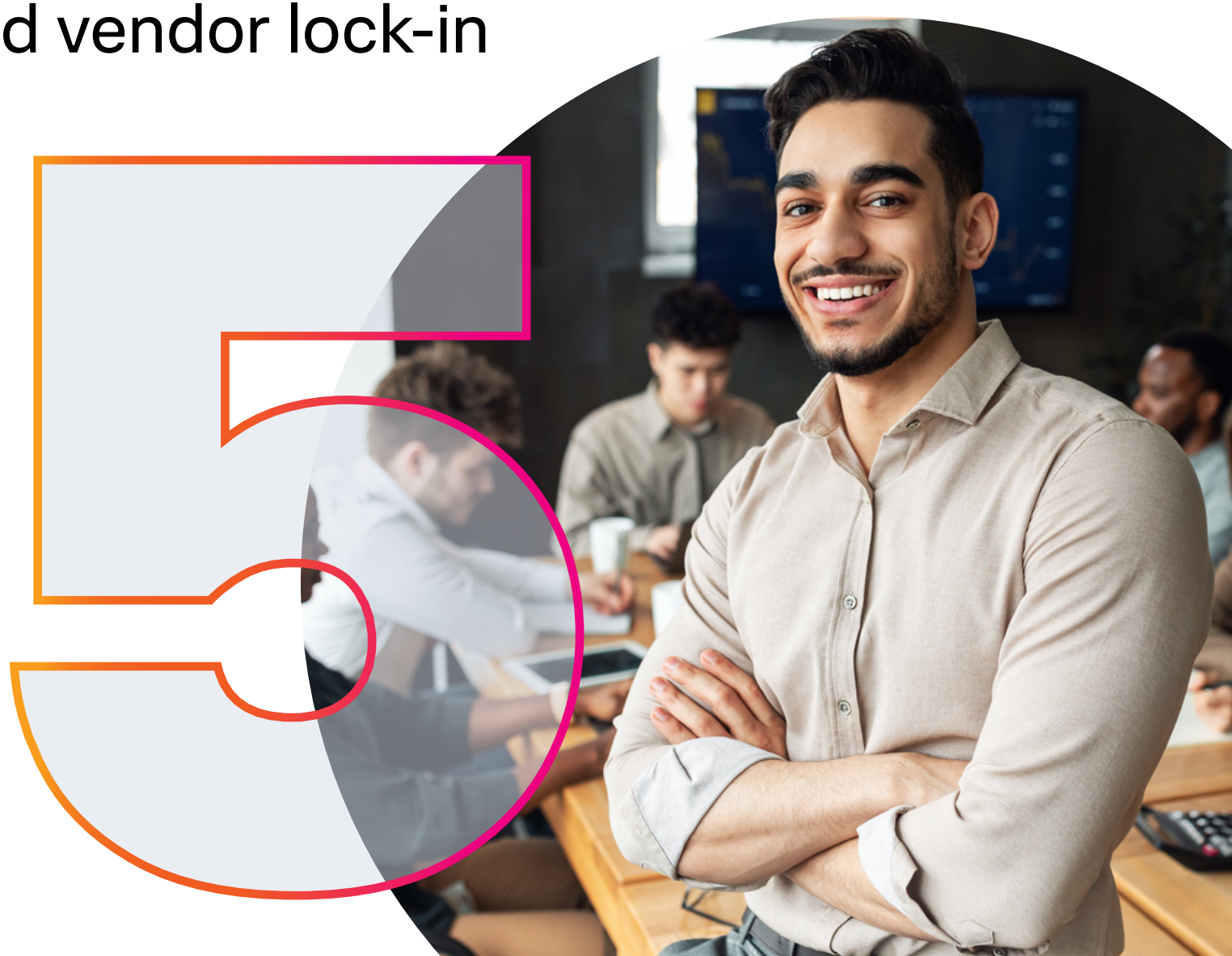
5 Reasons Managers Choose OpenTelemetry

How to avoid vendor lock-in



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The OpenTelemetry project is all about freedom. It's like the '60s in San Francisco — free love for your data. Why would you want to be forced into a long-term relationship with your vendor?

You may like them now, but things change. And pricing will change. Maybe a newer, more fully-featured vendor comes along, who offers better pricing and more intuitive dashboards. It's easy to fall in love with a sparkling dashboard. And if your current vendor provides essential infrastructure and your relationship changes, the divorce will be messy — if not impossible. What happens when you're ready to take your data and walk out the door?

As long as you have data independence, it doesn't matter who you send your telemetry to — what's important is that it works for you. That's why the OpenTelemetry project is so important.

If you don't want to commit your data to one vendor until death do you part, you're in the right place.

01

Free your code — and the rest will follow

Why is this important? Because it's YOUR data.

"Freedom's just another word for nothing left to lose." Thank you, Janis Joplin. But freedom is also about choice, which is critical when it comes to data. Freedom is at the heart of OpenTelemetry.

As real-time analytics and AIOps evolve, app developers need to be able to send their data to the observability platform that best addresses their needs. Before OpenTelemetry, legacy vendors used to make their instrumentation proprietary, thereby locking their customers in and limiting their choice as to what data to send and how to process it. Many legacy vendors continue to do so today, while paying lip service to open standards.

We're not here to name names, but there are many vendors that still lock you into their proprietary ecosystem. Given that many companies have moved away from monolithic architectures into microservices, it's necessary to go with a provider who will set you up with OpenTelemetry from the beginning.

02

Embrace the cloud

If all your friends jumped off a bridge, would you?

Probably not. Too much risk, not enough reward. But what about when it comes to technological innovation? If all your friends (and many of your competitors) have seen the rewards and managed the risks of embracing the cloud, shouldn't you?

If you've already gone all-in on the cloud, here's more good news:

OpenTelemetry is critical to fully embracing the cloud, which is why the biggest cloud vendors, providers and end users are involved in the project.

OpenTelemetry is the combination of two overlapping open source distributed tracing projects, OpenTracing and OpenCensus, merged into a single project.

OpenTracing, hosted by the Cloud Native Computing Foundation (CNCF), was an effort to provide a standardized API for tracing. Among other things, it let developers embed instrumentation in commonly used libraries or their own custom code without getting locked into a particular vendor. It was a unique concept at the time of its implementation. Though OpenTracing gave developers much-needed flexibility, it had limited applications and inconsistent implementations because it focused solely on tracing.

Google developed OpenCensus based on its internal tracing platform. It was eventually open-sourced, and Microsoft, along with other vendors and contributors, got involved and began evolving the standard. OpenTelemetry came about when the two projects agreed to merge the codebases of the OpenTracing and OpenCensus projects, incorporating the strengths of each under CNCF control.

Hybrid and public clouds are becoming exceedingly popular since they provide IT and DevOps teams with the flexibility needed to quickly innovate and respond to dynamic market conditions. The pace of innovation in the cloud outstrips anything we've seen in the past, and new services and capabilities are continuously being developed and introduced. In such an environment, legacy APM vendors often can't keep up with the proliferation of tools and frameworks, thereby limiting their customers' ability to innovate. Customers may desire new languages or new frameworks that aren't supported by the existing proprietary agents.

Only an open-source framework supported by a global community of developers can keep up with the latest trends and technologies. More than 444 companies currently support and contribute to the advancement of OpenTelemetry, including:

- Splunk
- Google
- Microsoft
- Amazon
- Honeycomb
- Lightstep
- Uber

03

OpenTelemetry facilitates observability

What is observability without data? (This isn't a zen koan.)

If a tree falls in a forest …

What is the sound of one hand clapping?

(These might be.)

If there's no data to observe, then it'll be near impossible to achieve observability. Or, if you collect terabytes of data and store it in silos and can only access it with proprietary point tools — where does that leave you?

The essential action to make your application observable is having it emit robust telemetry.

OpenTelemetry provides tools to collect data from across your technology stack (end-user activity, infrastructure, and applications through frontend, mid-tier and backend), without getting bogged down in tool-specific deliberations. Ultimately, this data helps facilitate the healthy performance of your applications and vastly improves business outcomes.

Organizations need to add instrumentation across their infrastructure to gain end-to-end visibility. This is challenging to do with a single commercial solution because few commercial solutions have a truly end-to-end scope, but OpenTelemetry does, and it standardizes the instrumentation needed to collect telemetry data from all components of your business. It's key to an observability practice and you won't need a degree in philosophy to make sense of it.

This open-source project removes the shackles most organizations encounter with agents and client libraries so they can effortlessly move past instrumentation and focus on monitoring, observability and shipping great code.

This is the way.

04

OpenTelemetry is vendor agnostic

Some vendors are great, some aren't — and that's ok.

The past few years have been all about digital transformation. The pace of change can be dizzying, but it's often necessary. When new technologies emerge, you probably don't have time to wait for vendor support for instrumentation.

Here are some of the benefits of avoiding vendor lock-in:

- The flexibility to change backends without having to change instrumentation.
- Enhanced security and privacy through open-source tools and robust support for controlling or editing telemetry data before export.
- A single set of standards lets you work with more vendors, projects and platforms.
- Installing and integrating OpenTelemetry is often as simple as dropping in a few lines of code.

05

Scale is exactly why you OTel

OpenTelemetry is a collection of tools, APIs and SDKs. Use it to instrument, generate, collect and export telemetry data (metrics, logs and traces) to help you analyze your software's performance and behavior.

Enterprises have to operate at scale, which is the primary inhibiting factor to adopting any new tooling or process. In these environments, open instrumentation with OTel is not really a choice – it's a necessity. OpenTelemetry gives enterprises the freedom to scale modern monitoring and observability practices without thinking about tool-specific considerations. It's truly open nature lets you trust that it will be supported in the future, and empowers you to adapt and expand it to the unique needs of your business.

Based on OpenTelemetry standards, Splunk delivers enterprise performance and scale as well as centralized management of teams, usage and costs without fear of vendor lock-in. See how a fictional e-commerce site benefits from Splunk Observability Cloud in this short demo.

Learn more about OpenTelemetry or check out 9 Key Practices of Observability Leaders.

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