

Insight 

Understanding

PLATFORM

ENGINEERING





Introduction

Today's organizations are looking to modernize IT operations to meet their business-critical needs faster. Modern companies are largely settling on three disciplines that work hand in hand to construct the modern platform team: DevSecOps, FinOps and platform engineering. In this ebook, we will briefly explore DevSecOps and FinOps before diving deeper into platform engineering.



What is DevSecOps?

DevSecOps is the continuous integration of security throughout the DevOps cycle. In a typical [DevOps](#) workflow, the app delivery can be held back by end-of-process security tests, substantially delaying release time. DevSecOps ensures security is weaved into every stage of the DevOps flow without reducing the speed of production. The intent is to integrate security into the development process rather than bolting it on at the end of the process. This integrated approach delivers secure products faster with significantly less developer friction.



What is FinOps?

Cloud FinOps, or cloud Financial Operations, is an ongoing practice in which finance, engineering and business teams collaborate to [improve financial management and visibility of cloud spending](#). A successful cloud FinOps framework provides financial oversight while counteracting budget overages, lack of business visibility, waste and operational inefficiencies. Well-run FinOps teams enable financial prudence while not getting in the way of the time to value that DevSecOps teams are charged with.



What is platform engineering?

According to Gartner®, “[p]latform engineering is an emerging technology approach that can accelerate the delivery of applications and the pace at which they produce business value.”¹ Platform engineering provides self-service, automated capabilities to significantly improve end-user experience and productivity via a common set of platforms for internal developers to leverage. Platform teams maintain an internal product whose goal is to eliminate the cognitive workload from the developers in running common platforms. In essence, developers leverage the platforms that are made available to them instead of building them for each product. Importantly, DevSecOps, FinOps and platform teams work collaboratively, with each group focusing on their strengths.

DevSecOps applied

Learn some of the challenges that companies that want to create a DevSecOps program face and how Insight can help businesses achieve a modern, agile and responsive IT environment.

[Watch the video](#) →

How DevSecOps, FinOps and platform engineering intersect

DevSecOps, FinOps and platform engineering disciplines intersect under the modern platform team umbrella. Platform engineers help drive speed and efficiency for stakeholders (DevOps teams, FinOps teams and business leaders) while decreasing cognitive load.

Platform engineering holds the power to accelerate the application delivery process, enabling operational and developer teams to meet business outcomes faster.

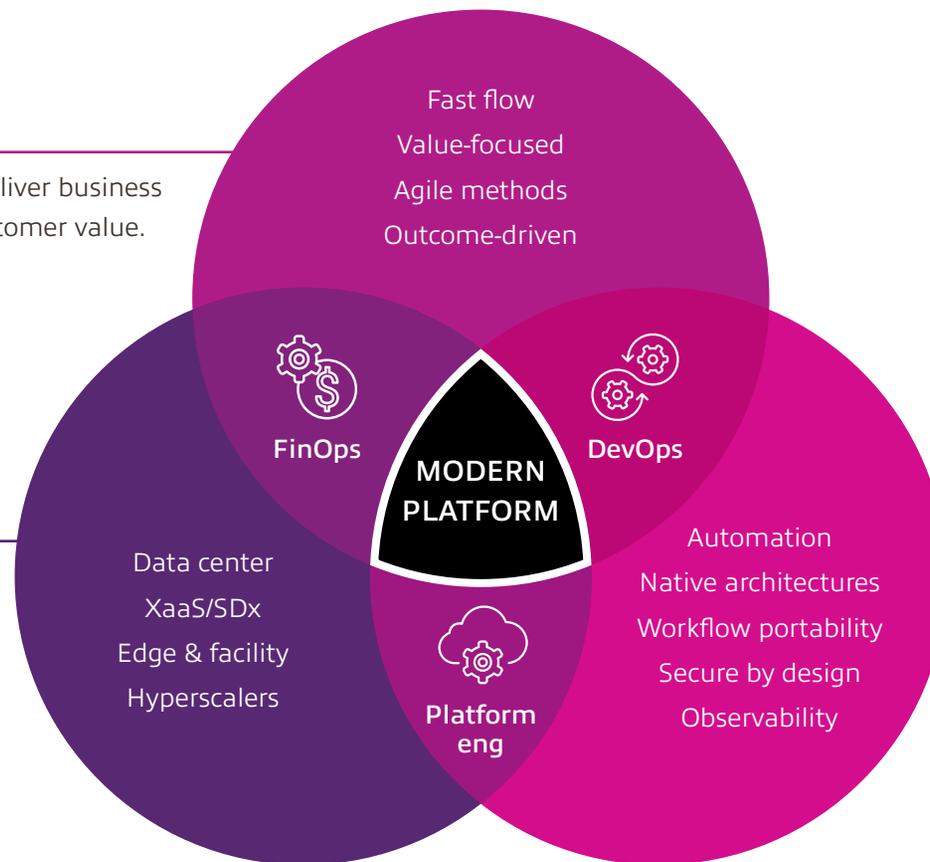
But how exactly does platform engineering work, and how are top IT companies using it today?

Principles

Align practices and culture to deliver business initiatives with the focus on customer value.

Providers

Match the right cloud and platform services to deliver compelling solutions for your business.



The modern platform-as-code

- Well-architected landing zones
- Cost management & optimization
- Quota & budget management
- Platform governance & policy
- Platform security & guidance
- Pre-defined services catalog

Patterns

Evolve with new template-driven architectures and repeatable service delivery.



A deeper look into platform engineering

Platform engineering background and definition

Over the past two decades, DevOps has become the standard practice for modern software engineering organizations. But as DevOps increased in popularity, the intricacies of DevOps software architecture also grew, and cognitive load for many developers increased as they became liable for the management of their applications' delivery lifecycle.²

In response to the growing complexities of today's architectures, platform engineering emerged as a solution. Platform engineering attempts to remedy developer cognitive overload by creating platforms that simplify and cover the operational necessities of the application lifecycle.

Gartner states "[t]he engineering platform is created and maintained by a dedicated product team, designed to support the needs of software developers and others by providing common, reusable tools and capabilities, and interfacing to complex infrastructure."¹

Platform engineering teams work to build toolchains and processes that enable self-service (ticket-less) capabilities, most often accomplished through a product referred to as an Internal Developer Portal (IDP).¹

This can be compared to how DevSecOps runs their teams.

"Platform engineering teams can be viewed as internally focused DevSecOps teams with very specialized skills: infrastructure knowledge, automation knowledge, security knowledge and the ability to write code."

— Juan Orlandini, Insight Distinguished Engineer

Pay your developers to write code, not manage it.

What is the true cost of a developer's time? Many companies fall into the challenge of losing developer man-hours by having developers manage code instead of writing it. In this expert-written article, learn what steps businesses can take to avoid this common pitfall.

[Read the article](#) →

3 best practices of successful platform engineering teams

Organizations may race to integrate platform engineering as part of their software engineering practices, but without a thorough understanding of best practices, many are unable to witness their efforts turn to fruition. Here are the top best practices agreed upon by platform engineering practitioners.



1 Understand the role of a platform engineering team.

As the existence of platform engineering teams is new, their role in an organization can often be misunderstood. Some companies mistake platform engineering teams as separate DevOps teams, or even view these teams as additional operational support units. It's crucial to gain companywide buy-in on the role of a platform engineering team: to reduce cognitive load by providing self-serviced, streamlined platforms.



2 Recognize that platform engineering is an iterative process.

With platform engineering, it's not a "build it and they will come" mindset. A well-run platform engineering team treats and runs platforms as internal products. This perspective allows platform engineering teams to collaborate with end users, open the feedback loop and discuss what's most crucial to ensure the platforms are built to satisfy their unique needs.

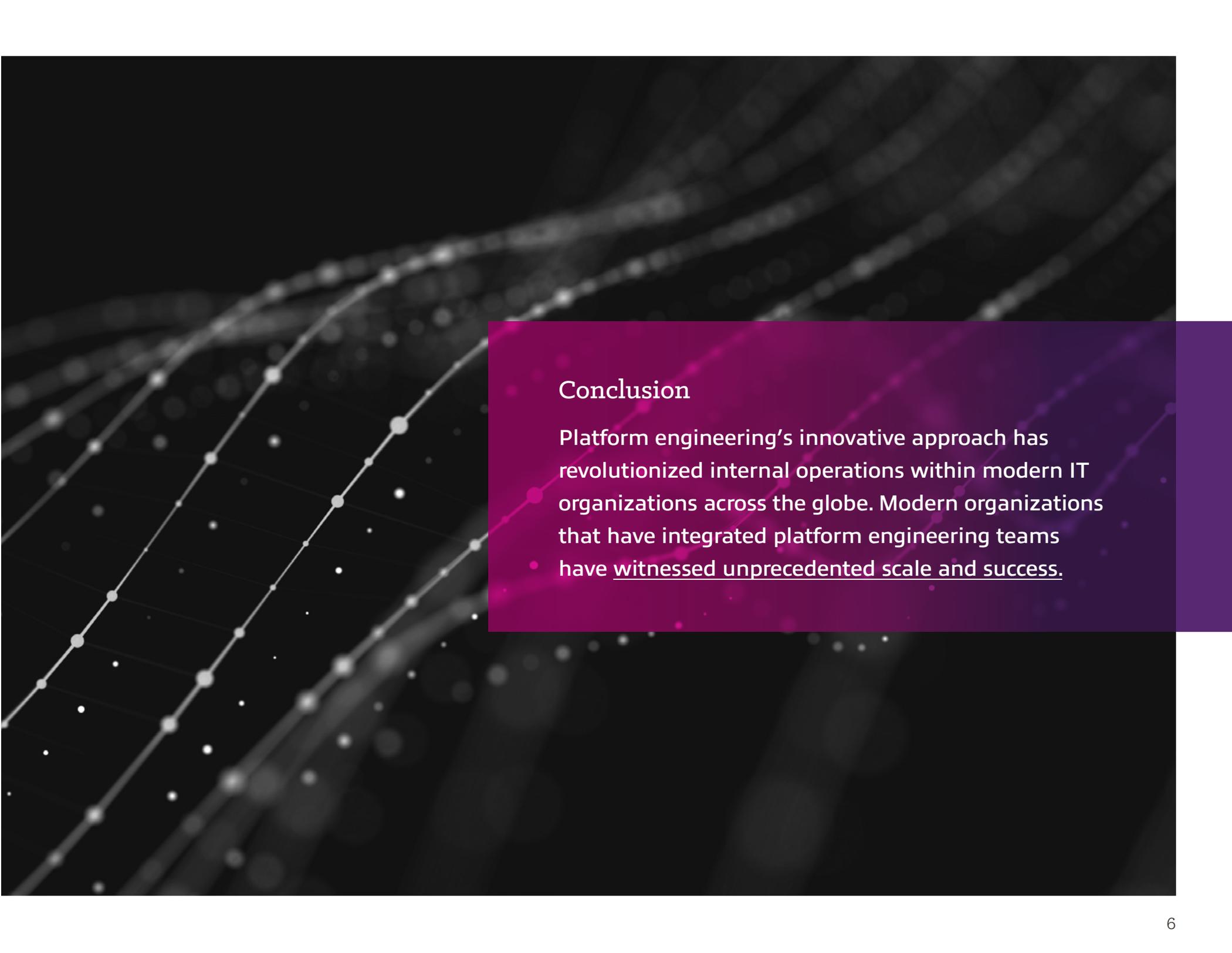


3 View automation as an enabler.

Automation is an enabler of platform engineering. Platform engineering teams offer services that developers consume. In this context, "services" refers to the tools that are used by developers to deliver value. Developers consume these tools in a self-service manner and explicitly through an Application Programming Interface (API). That API becomes the boundary layer between the DevSecOps, FinOps and platform engineering teams. They also become a contract between the platform engineering teams and their consumers that essentially conveys, "If you consume this API, I guarantee this level of capability."

"The biggest mistake would be for a platform engineer to build something and say to developers 'look at what I built you.' Instead, platform engineering teams should interview the appropriate stakeholders — DevOps, FinOps and business leaders — and decide which systems and platforms should become common territory. Then they can create a first version of that, test that, verify, correct or add functionality, and repeat. It's a never-ending process. That's what makes it a product. Not a project."

— Juan Orlandini, Insight Distinguished Engineer



Conclusion

Platform engineering's innovative approach has revolutionized internal operations within modern IT organizations across the globe. Modern organizations that have integrated platform engineering teams have witnessed unprecedented scale and success.

Ready to explore how platform engineering can transform your organization?

No matter what stage you are at in your digital transformation journey, it is essential to have the right partners to better support your business outcomes and drive real value. At Insight, we have trained experts that collaborate with clients across common challenges and more.

Contact us today to get started.

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Sources:

¹ Gartner, What Is Platform Engineering?, Lori Perri, 5 October 2022.

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² Humanitec. (2022). State of Platform Engineering Report.