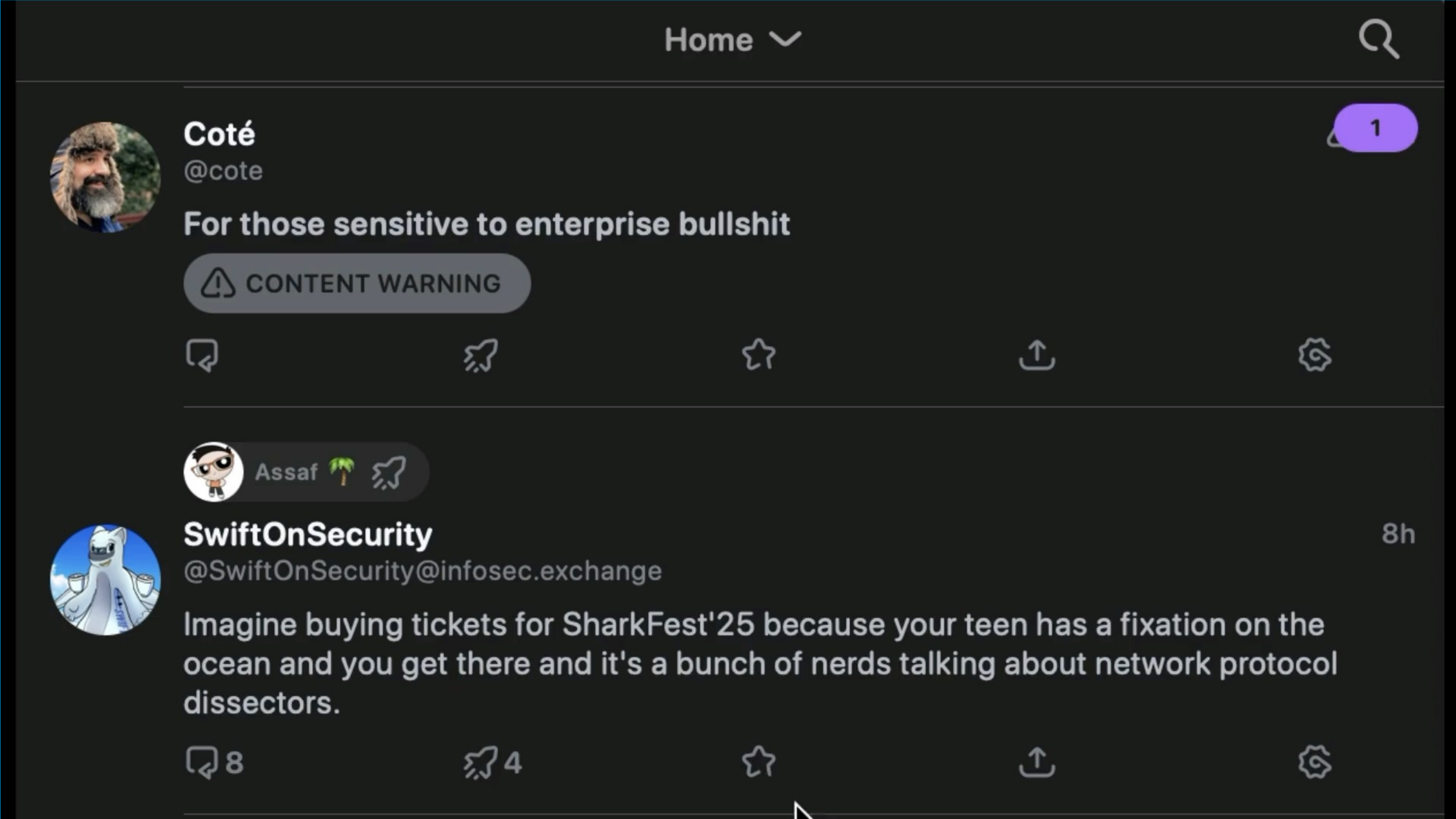
7 Ways to Fail at Building a Platform

Coté – cfgmgmtcamp, Feburary 2nd, 2026.



Coté
@cote

For those sensitive to enterprise bullshit

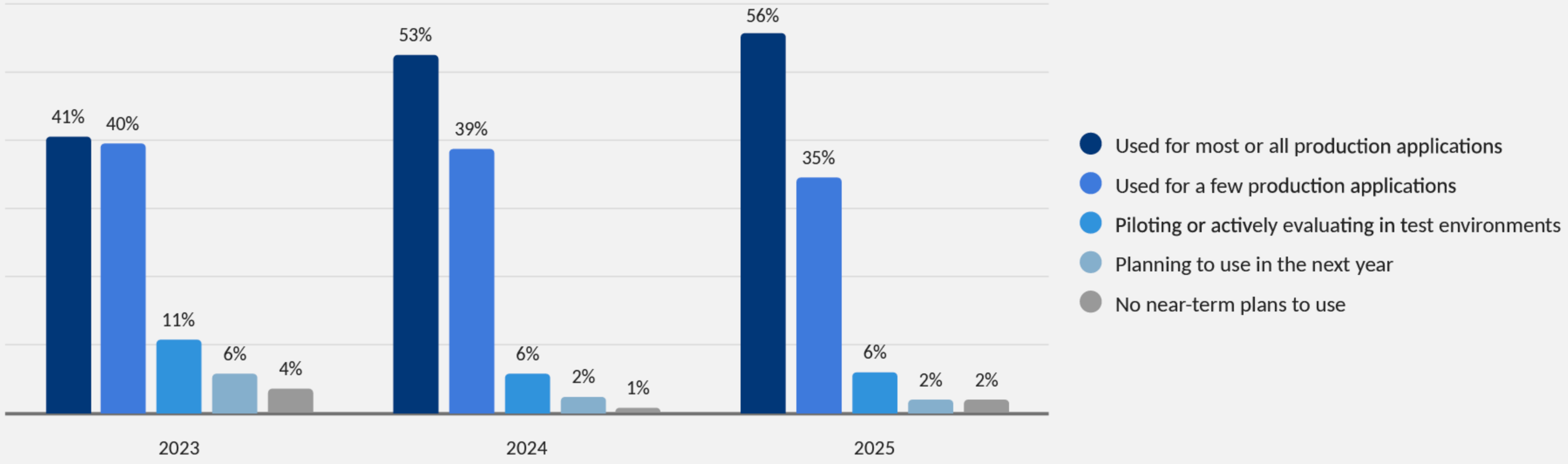
SwiftOnSecurity
@SwiftOnSecurity@infosec.exchange
8h

Imagine buying tickets for SharkFest'25 because your teen has a fixation on the ocean and you get there and it's a bunch of nerds talking about network protocol dissectors.

FIGURE 6

CONTAINER USAGE

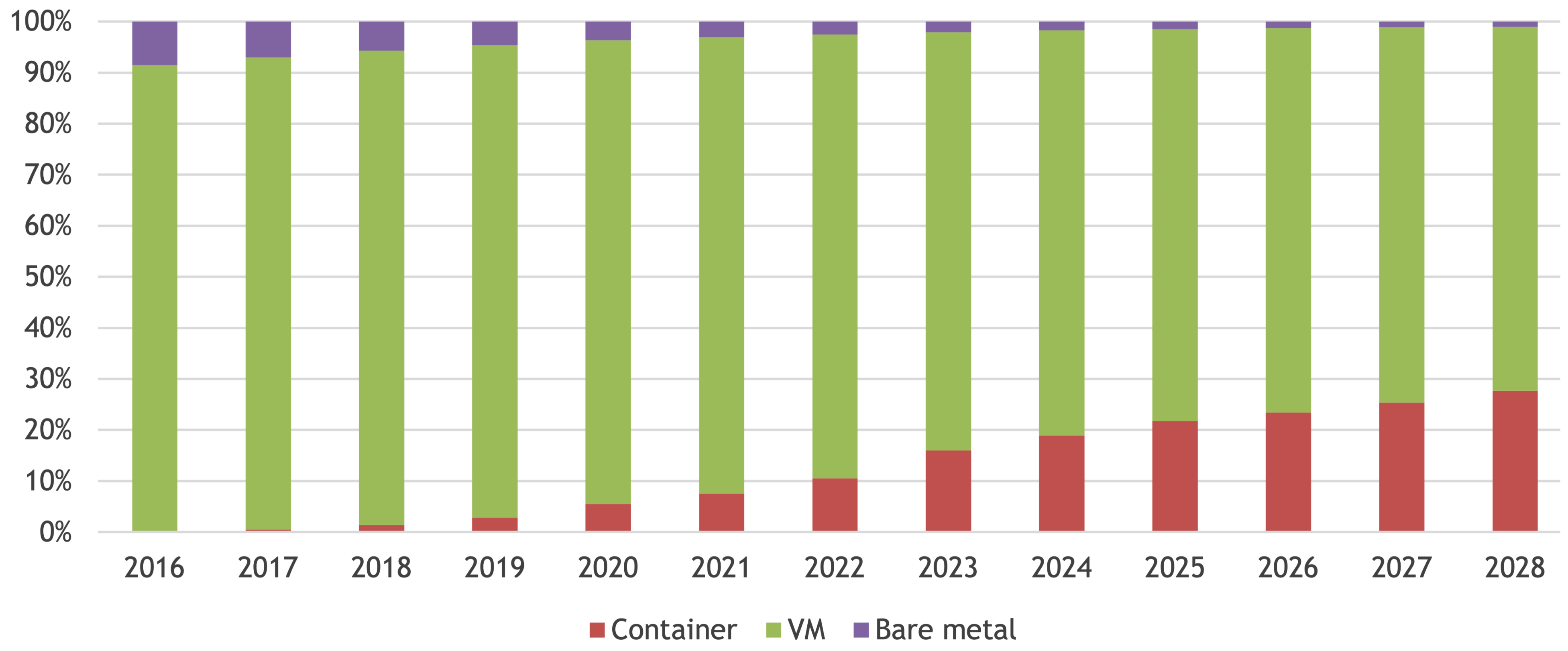
How are containers used within your organization? (select one)



2023-2025 CNCF Annual Survey, Q19, Q20, Sample size = 522, 408, 365, shown to enduser organizations based on Q9 and Q10 in 2024 and 2025, Q14 in 2023, DKNS excludedexcluded

Source: "CNCF Annual Cloud Native Survey," LF & CNCF, January, 2026. See also app share estimates.

Worldwide Logical Server Installed Base by Deployment Model (Enterprise, Excluding DSP), 2016–2028



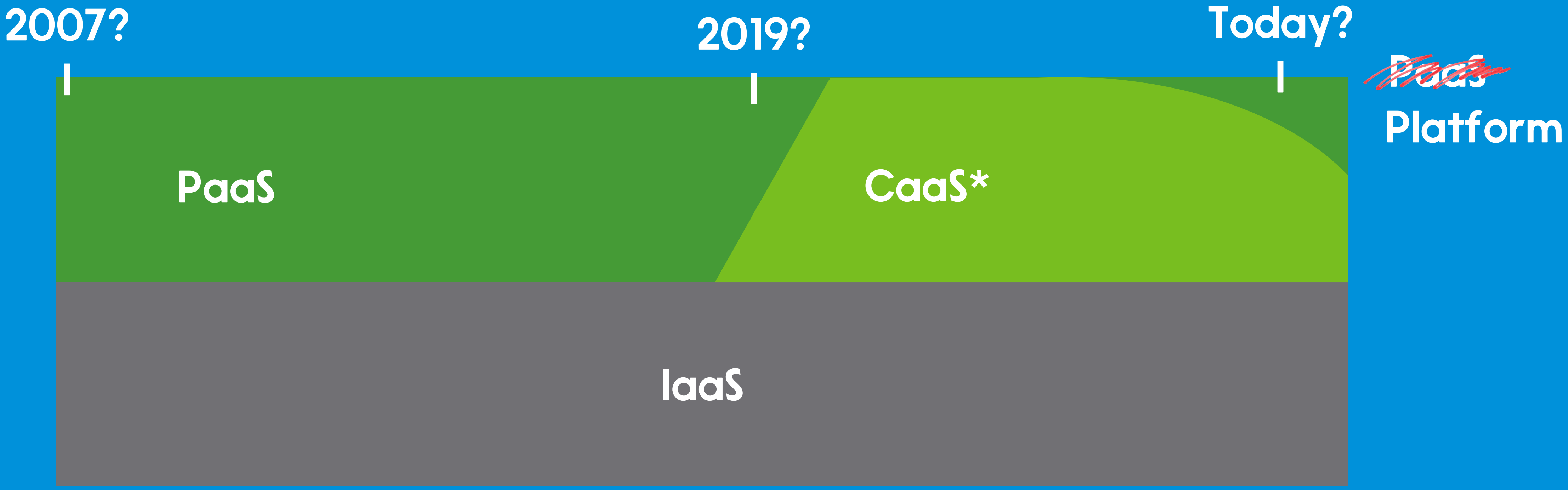
Note: For more details, see *Market Analysis Perspective: Worldwide Software-Defined Compute, 2024* (IDC #US52787524, December 2024).

Source: IDC, 2024

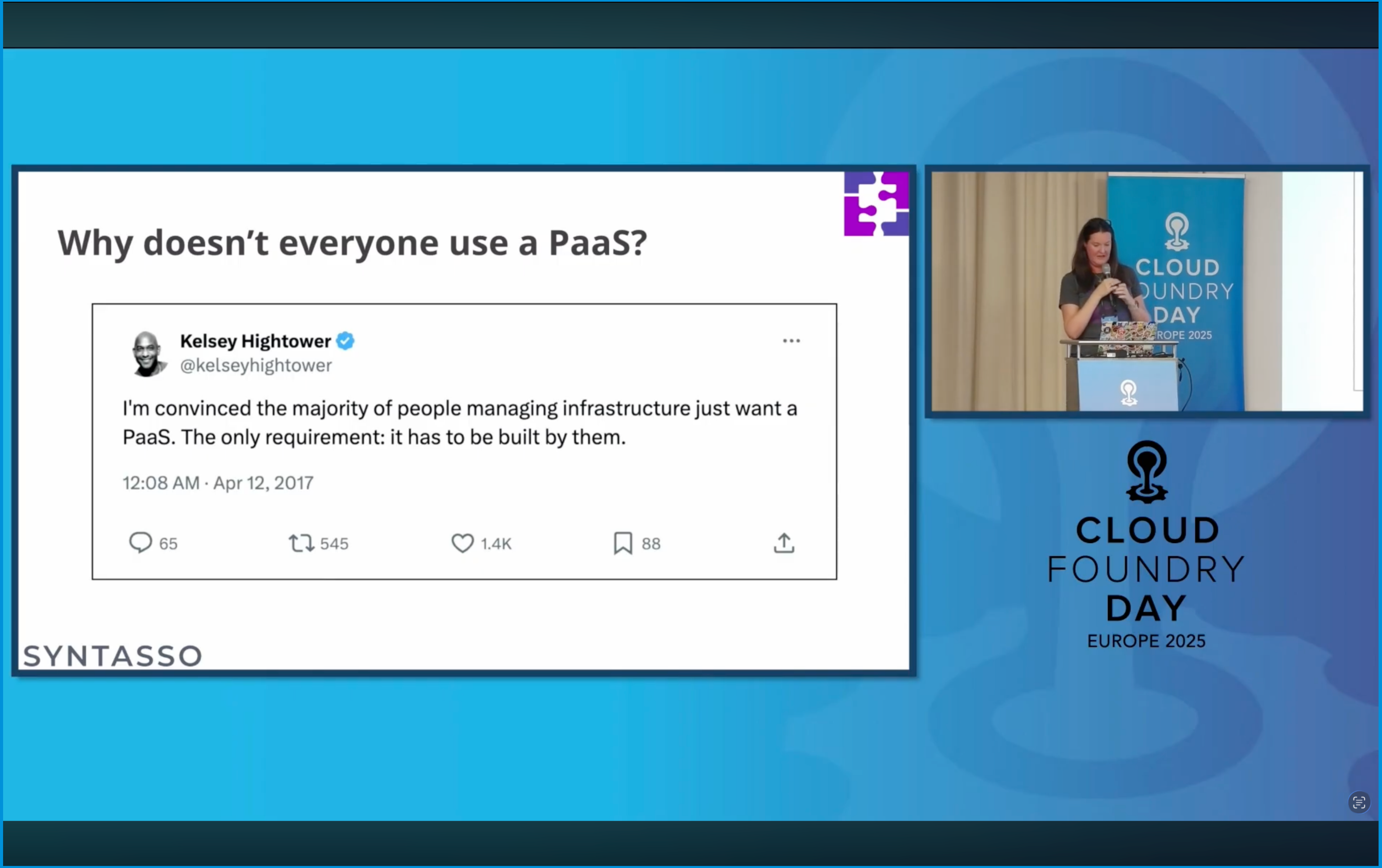
Source: "The Convergence of Containers and VMs in Modern IT Infrastructure: Simplification with a Single Platform," November, 2025, IDC #US53889225. Sponsored by Broadcom.

"[B]y 2027, 80% of large organizations will embrace platform engineering to successfully scale DevOps initiatives in hybrid cloud environments — up from less than 30% in 2023."

Gartner, 2025.



* Code word for "Kubernetes."



Why doesn't everyone use a PaaS?

Kelsey Hightower
@kelseyhightower

I'm convinced the majority of people managing infrastructure just want a PaaS. The only requirement: it has to be built by them.

12:08 AM · Apr 12, 2017

65 545 1.4K 88

SYNTASSO

Sources: ["From Cloud Foundry To Cloud Native: Empower Application Deployment With Kratix and Paketo,"] Paula Kennedy & Derik Evangelista, Syntasso, CF Day EU, October, 2025.

“Don’t build something if you can buy it.”

Sarah Wells, formally at FT, August, 2024.

“Do not blindly start with Kubernetes. Seriously. If your application can get by with a simple PaaS or Serverless offering I’d consider that first. Even VMs make sense for most situations.”

Kelsey Hightower, Autum, 2025

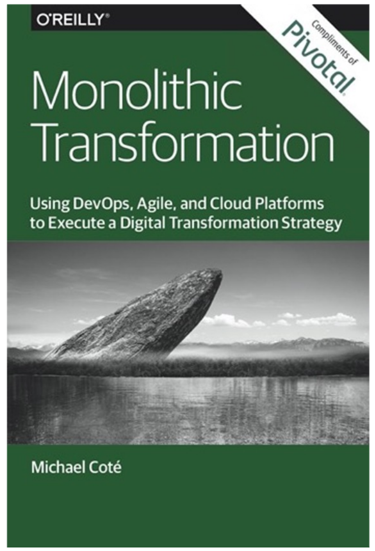
“It’s not about rebuilding what we can purchase that is available on the market. It’s about making sure we spend our time building the things that are bespoke and important for our organization.”

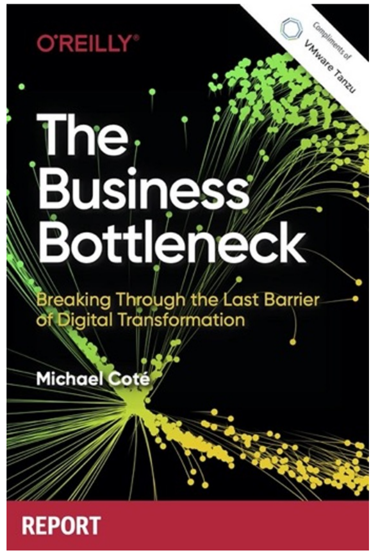
Abby Bangser, Syntaso, November 2025.

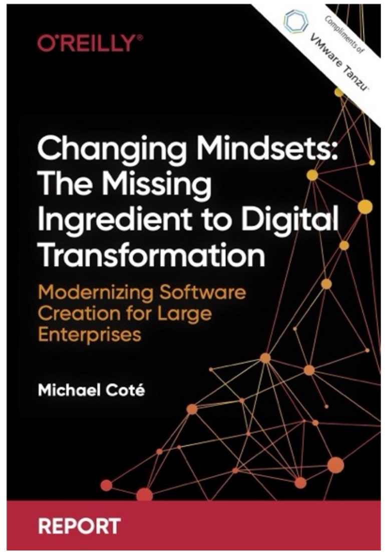
COME WITH ME IF YOU WANT TO LIVE.

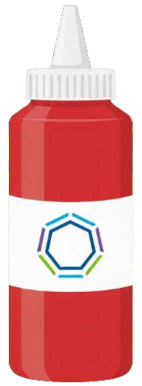
Coté

https://www.cote.io/ | cote@broadcom.com


O'REILLY
Compliments of Pivotal
Monolithic Transformation
Using DevOps, Agile, and Cloud Platforms to Execute a Digital Transformation Strategy
Michael Coté


O'REILLY
Compliments of VMware Tanzu
The Business Bottleneck
Breaking Through the Last Barrier of Digital Transformation
Michael Coté
REPORT


O'REILLY
Compliments of VMware Tanzu
Changing Mindsets: The Missing Ingredient to Digital Transformation
Modernizing Software Creation for Large Enterprises
Michael Coté
REPORT

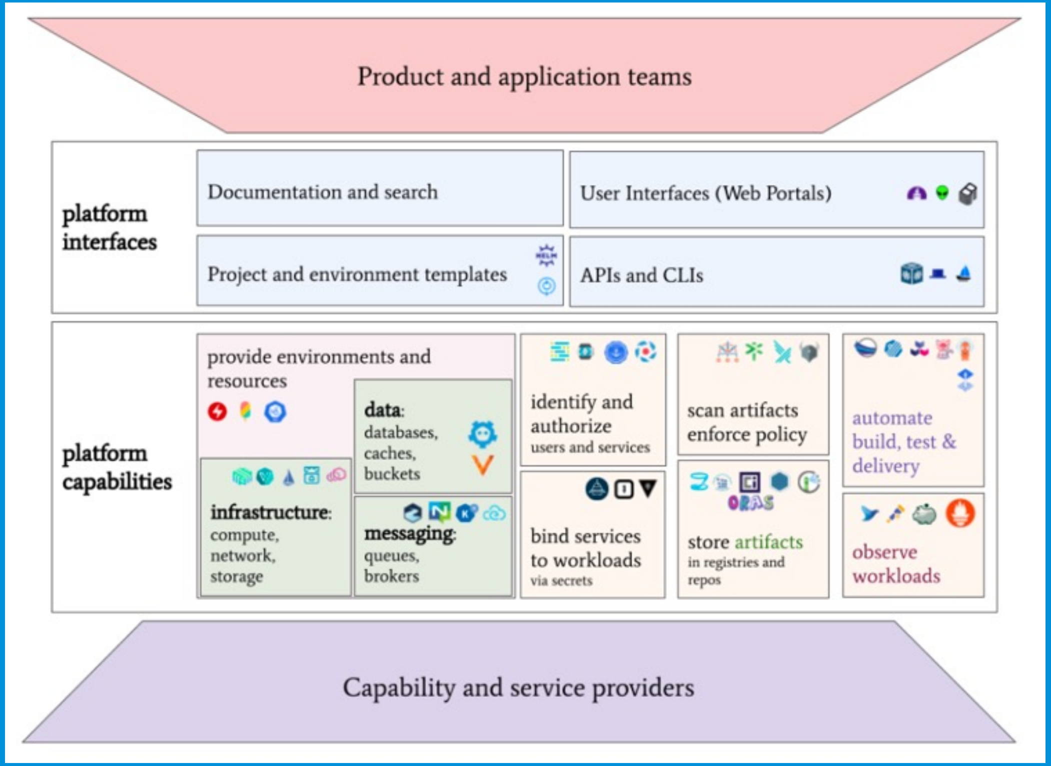


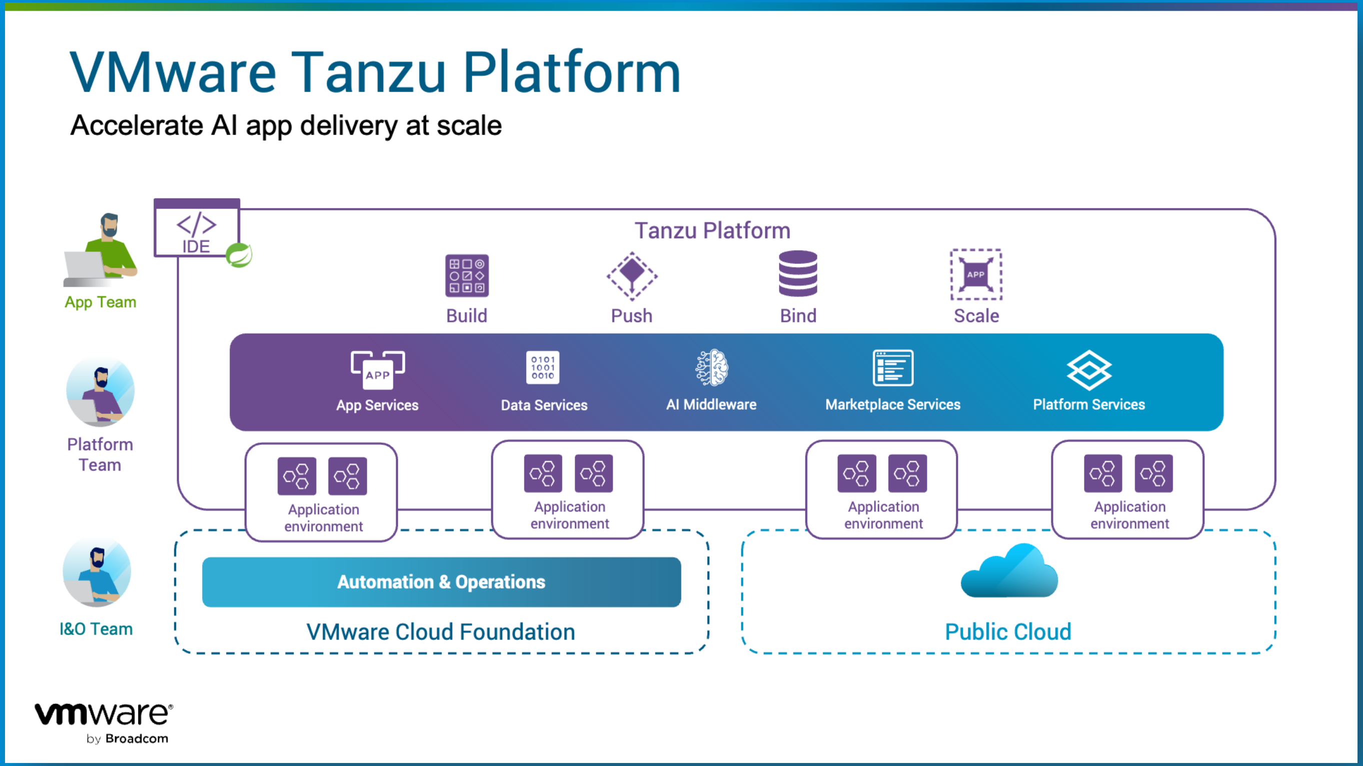
Tanzu Catsup

RedMonk | DELL | 451 Research S&P Global Market Intelligence | Pivotal | vmware | Tanzu by Broadcom

What is a platform?

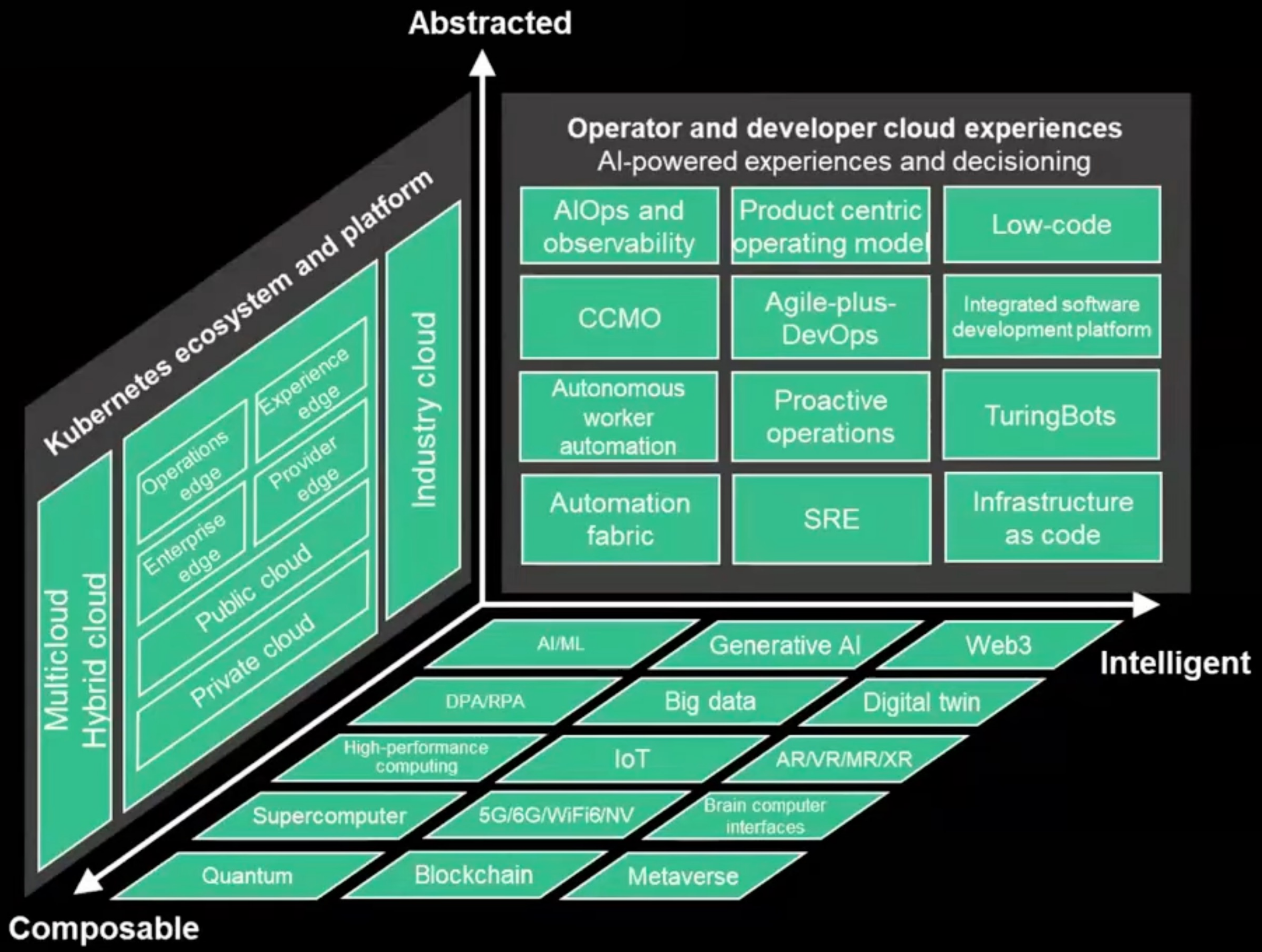
Centralized, standardized stack for building, running, and managing in-house apps.


Product and application teams
platform interfaces
Documentation and search
User Interfaces (Web Portals)
Project and environment templates
APIs and CLIs
platform capabilities
provide environments and resources
data: databases, caches, buckets
infrastructure: compute, network, storage
messaging: queues, brokers
identify and authorize users and services
bind services to workloads via secrets
scan artifacts enforce policy
store artifacts in registries and repos
automate build, test & delivery
observe workloads
Capability and service providers



Sources: “CNCF Platforms White Paper,” March 2023; VMware Tanzu.

The Future Of Cloud is **Abstracted, Intelligent,** and **Composable**



15

Sources: "Analyst Blog: The New Cloud Playbook – Kubernetes, Private Cloud, and Open Source," Forrester and Broadcom, January, 2026.

#1
Unexpected scope creep.

More than namespaces, yaml templates, & base container images

- App delivery.
- Backup and restore.
- Patch management.
- Observability, logs, monitoring.
- Service management & use.
- RBAC, etc.
- Vulnerability scanning.
- Dev framework integration.
- High availability & the other –ility's.
- Multi-region deployment.
- Sovereign cloud.
- Auditing and compliance.
- Multi-tenancy.
- Upgrading the platform.
- Gateways, brokers, load balancers, etc.
- CI/CD, itself or integration.

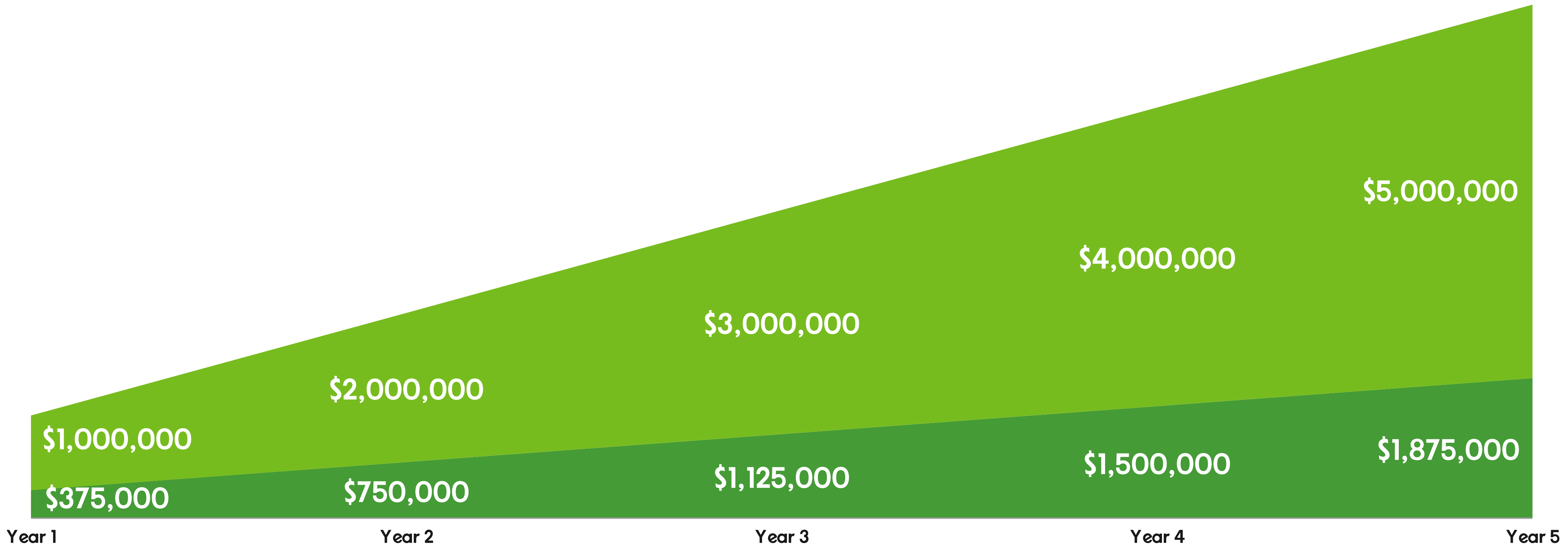
See also "Stop Renting Your Knowledge," Cur8s, Adib Saikali, Winter, 2025.

	Level 1 – Build	Level 2 – Operate	Level 3 – Scale	Level 4 – Improve	Level 5 – Adapt
Primary focus	First cloud native workloads	Production + standardization	Org-wide repeatability	Governance + security by default	Continuous optimization
Platform & infrastructure	Initial Kubernetes clusters Basic container registry Infrastructure as Code with Terraform	GitOps for apps via Argo CD or Flux Thin internal developer platform (templates, self-service) Centralized environments	Multiple standardized clusters (multi-region / multi-env) Formal Internal Developer Platform (portals, templates, APIs) GitOps extended to platform components	Drift detection + auto-remediation Zero-trust platform access Security posture management integrated with ops	Policy-driven workload placement (cloud/on-prem/edge) Platform continuously reshaped based on usage data
Application delivery	Helm or raw manifests via Helm Basic CI pipelines 1–2 pilot apps	Helm + Kustomize at scale Runtime config via ConfigMaps/Secrets Standard base images + scanning + SBOMs	Artifact signing + automated promotion pipelines Namespaces-as-a-Service Horizontal + event-driven autoscaling from app metrics	End-to-end supply chain security (signed images, enforced SBOMs) Admission controls everywhere	Progressive delivery (canaries, feature flags everywhere)Predictive scaling from production signals
Observability & operations	Minimal logging/metrics (often cloud defaults + early Prometheus)	Metrics + logs + early tracing using OpenTelemetry Central log aggregation	Distributed tracing as first-class signal Automated backup, DR, cluster lifecycle	Central audit pipelines (SCM, CI, clusters, apps) Runtime policy enforcement	Automated performance/reliability feedback loops Anomaly detection from live telemetry
Networking & security	Manual secrets Basic perimeter security	Admission controls Container/runtime scanning Early service mesh (often built on Envoy)	Operational service mesh (mTLS, retries, traffic shaping) Multi-tenancy with quotas	Workload identity + automated cert rotation Fine-grained authZ via mesh Zero-trust networking	AI-assisted remediation Continuous security optimization
Cost & optimization	Mostly manual cost awareness	Initial resource limits Early FinOps signals (namespace quotas, requests/limits)	Chargeback/showback per team or namespace	Integrated FinOps dashboards + budget controls	FinOps directly drives autoscaling and scheduling Continuous cost optimization
AI (where applicable)	Mostly experimental	First production models Basic observability + access controls			

Source: beta version of Cloud Native Maturity Model: Core content updates for v4.0 (#84).
Summarized by ChatGPT 5.2 on February 2nd, 2026.

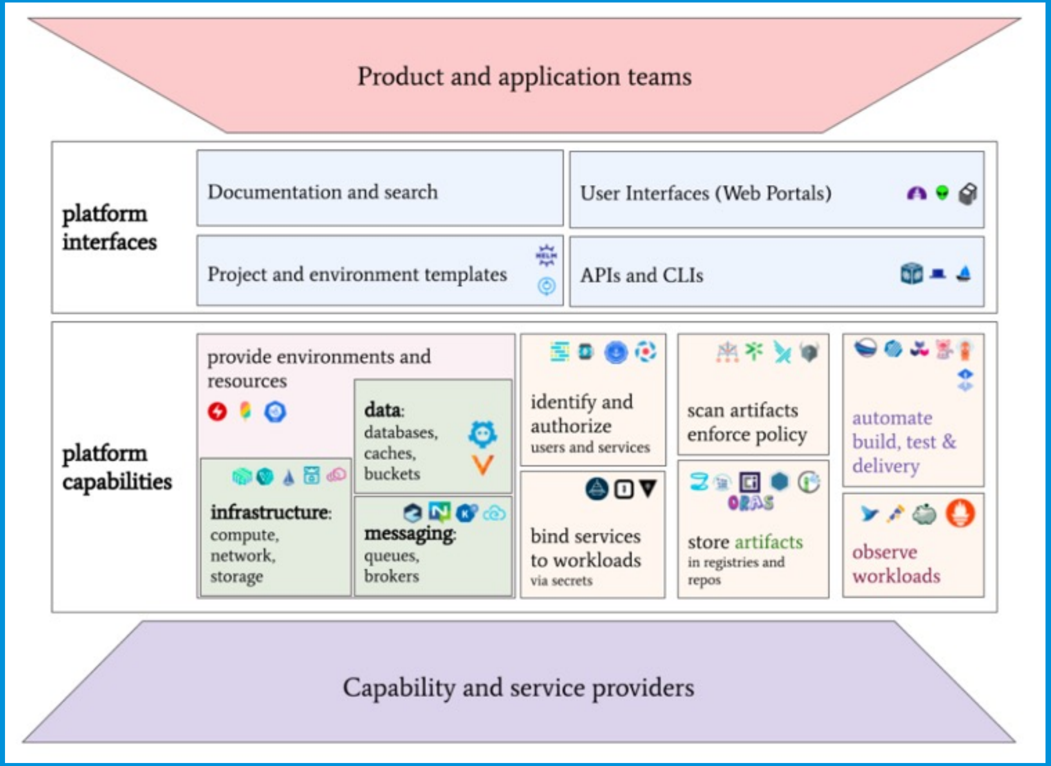
#2
Underestimating the ongoing investment

Cumulative
Platform Salary Spend
One team of 3 to 8 people, annually

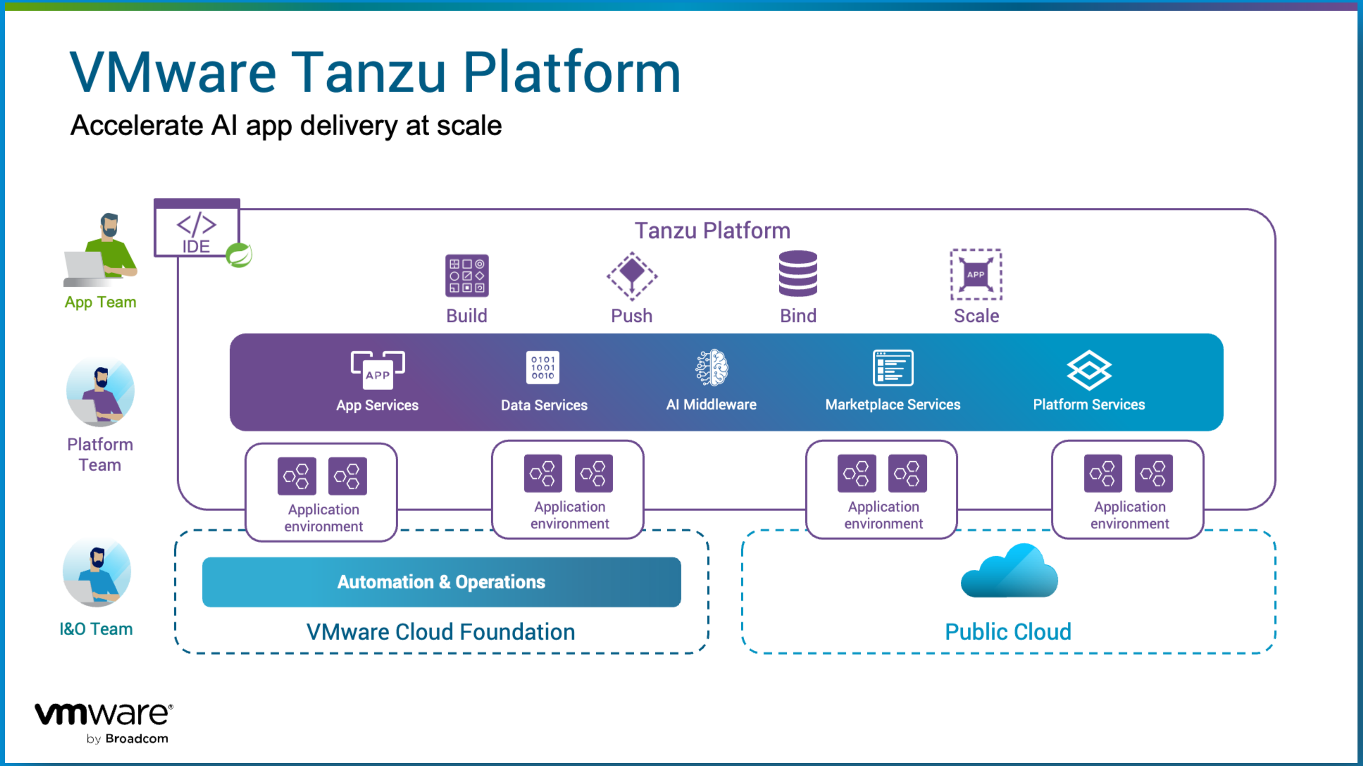


What is a platform?

Centralized, standardized stack for building, running, and managing in-house apps.

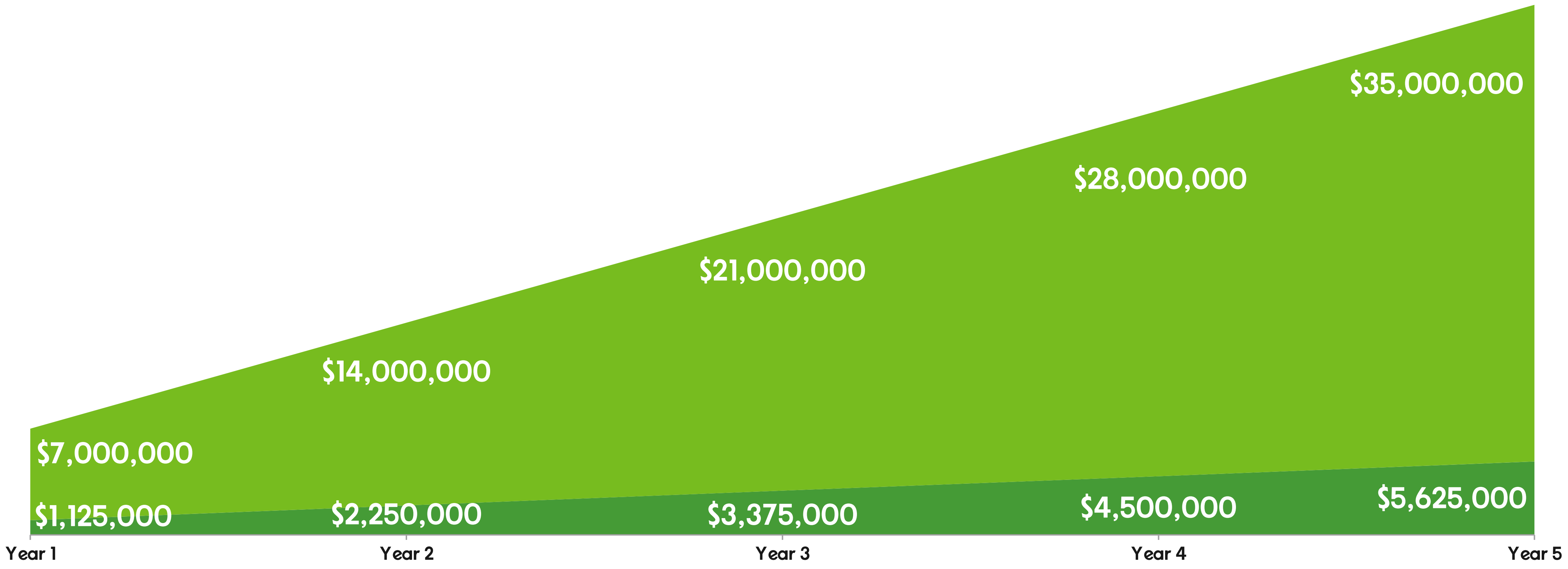


Product and application teams
platform interfaces
Documentation and search
User Interfaces (Web Portals)
Project and environment templates
APIs and CLIs
platform capabilities
provide environments and resources
data: databases, caches, buckets
infrastructure: compute, network, storage
messaging: queues, brokers
identify and authorize users and services
bind services to workloads via secrets
scan artifacts enforce policy
store artifacts in registries and repos
automate build, test & delivery
observe workloads
Capability and service providers



Sources: "CNCF Platforms White Paper," March 2023; VMware Tanzu.

Cumulative Platform Salary Spend 3 to 8 teams, annually



- Build the platform.
- Run the platform.
- Shadow platform engineers.

Sources: “How much does it cost to build an internal developer platform?” Tanzu Catsup, January 27th, 2026. Conversations with FSIs.

- 350 apps / 7 ops
- 300 apps / 8 ops

- 30,000 devs / 50 ops
- 6,500 devs/16 ops
- 2,500 devs / 5 ops
- 1,200 devs / 6 ops

- 45 app teams / 5 ops
- 300 app teams/ 4 ops

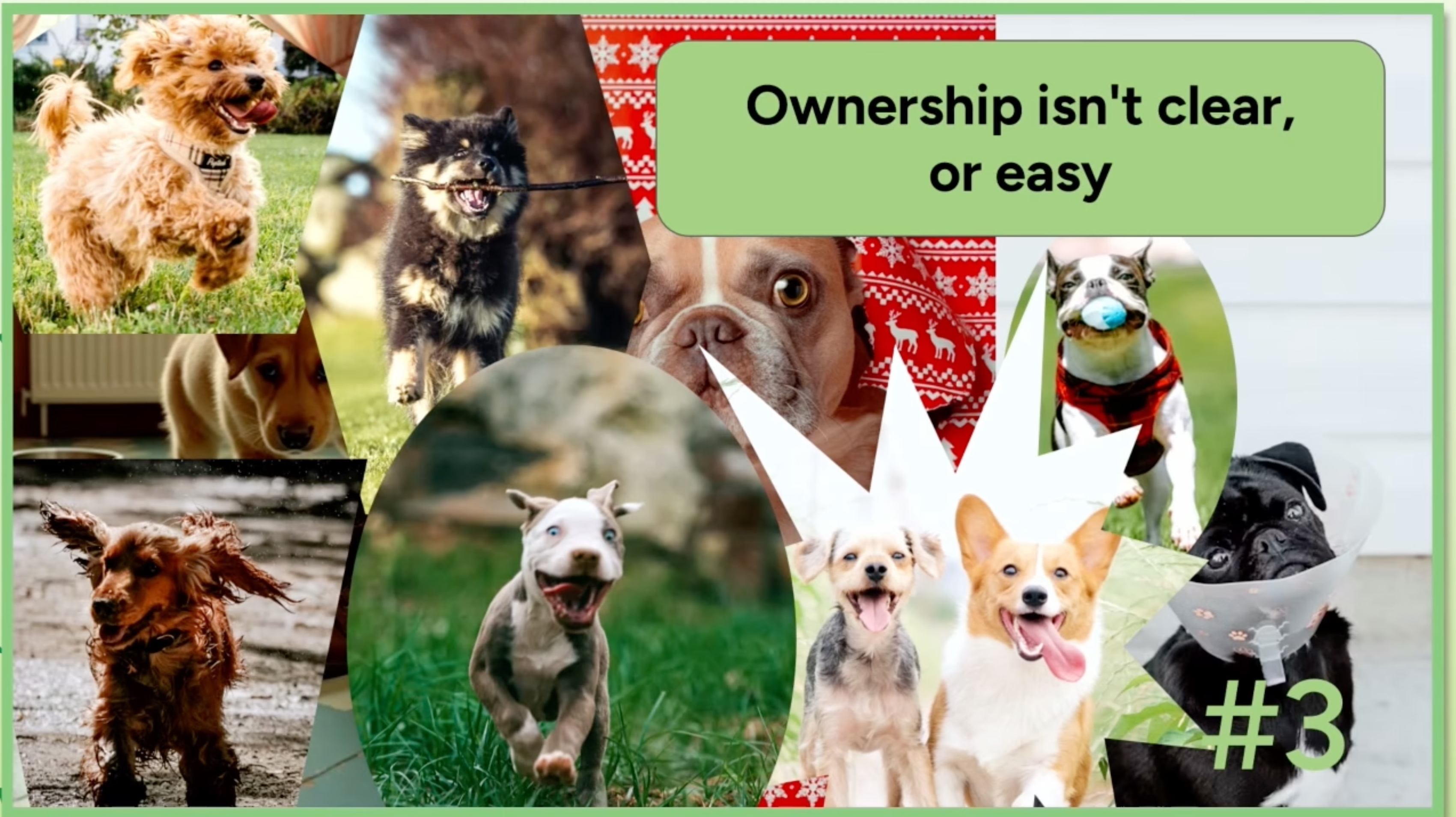
Sources: Kroger, GAIC, Mercedes-Benz, conversations with FSI platform engineers; "Enterprise Grade Platform Engineering at Charles Schwab," Coté, September, 2024, based on Schwab's Explore 2024 panel; Rabobank ops conversations, CF Day EU 2025, Oct 7th, 2025; "3 Cloud Foundry Stories," Coté, CF Day EU, Oct 7th, 2025.

#3
Platform as a project

#3

~~Platforms as projects~~

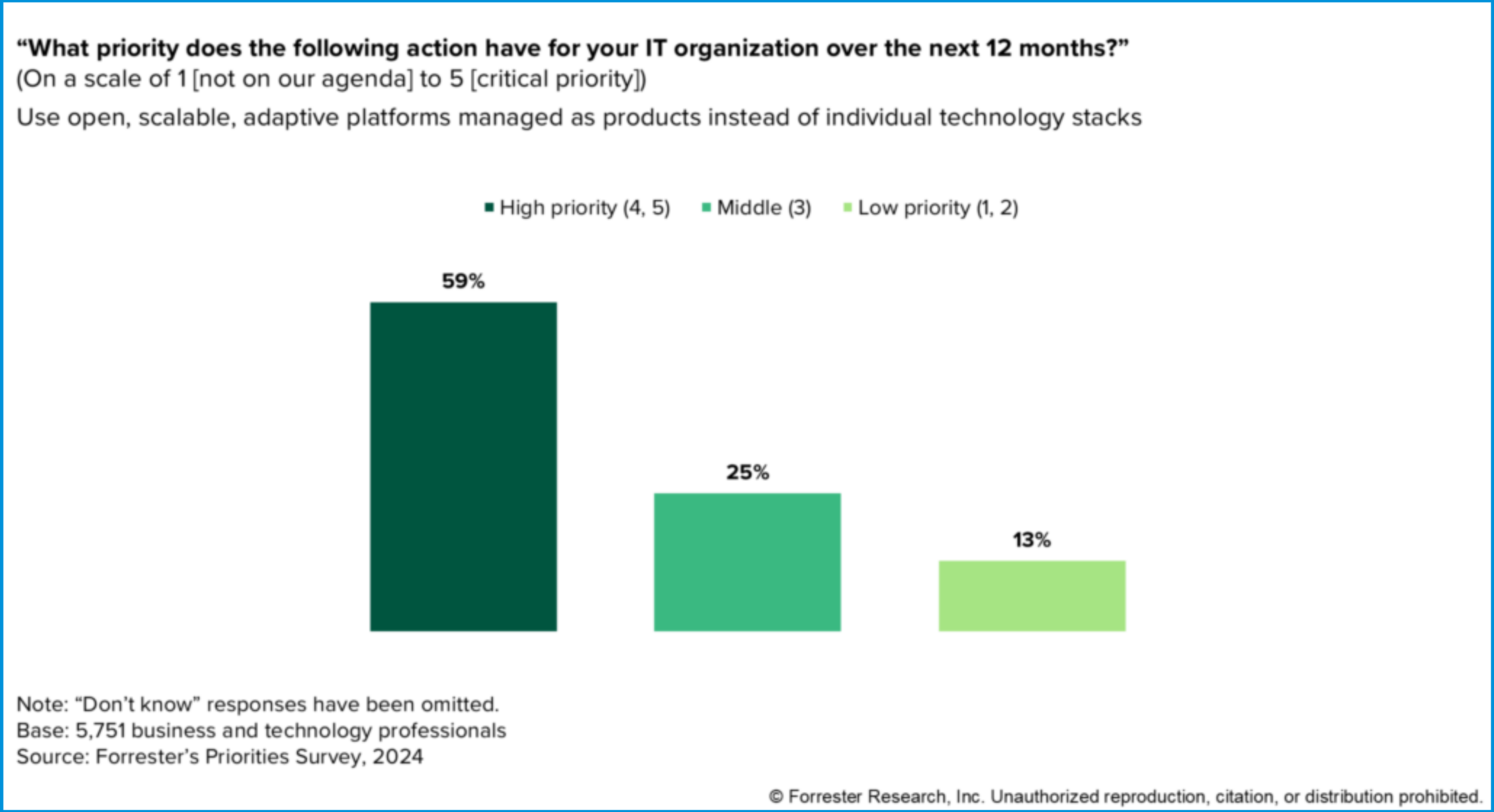
Platforms as sprawling Projects



Ownership isn't clear, or easy

KubeCon | CloudNativeCon North America 2025

Source: "Keynote: Beyond Operations: Scaling Platform Engineering in the CNCF Community," Abby Bangser, November 13th, 2026, KubeCon US.



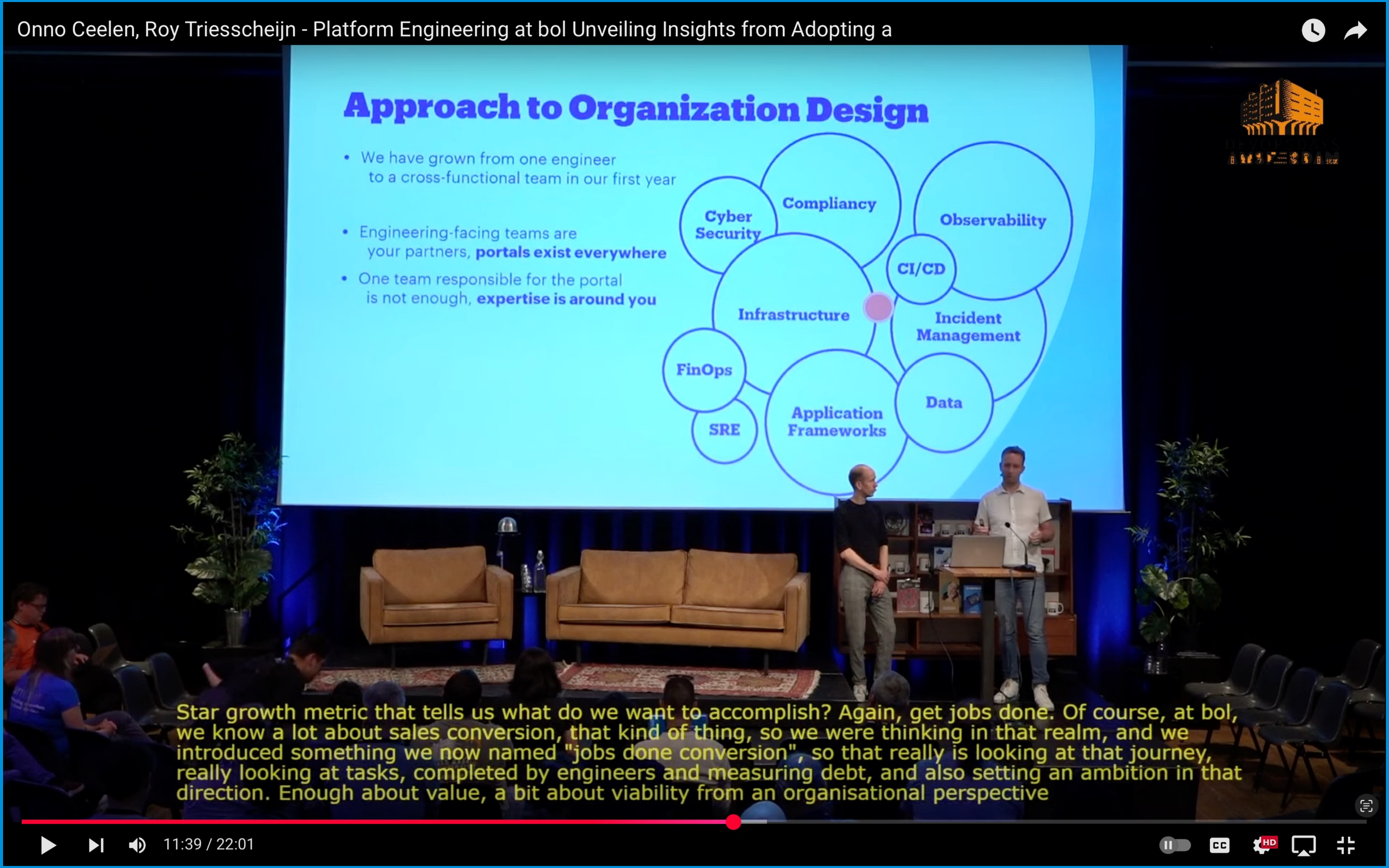
“What priority does the following action have for your IT organization over the next 12 months?”

(On a scale of 1 [not on our agenda] to 5 [critical priority])

Use open, scalable, adaptive platforms managed as products instead of individual technology stacks

Note: “Don’t know” responses have been omitted.
Base: 5,751 business and technology professionals
Source: Forrester’s Priorities Survey, 2024

Source: “Drive Scale And Speed With The Platform Org Model,” Manuel Geitz, Forrester, February, 2025. Survey conducted 2024.


Onno Ceelen, Roy Triesscheijn - Platform Engineering at bol Unveiling Insights from Adopting a

Approach to Organization Design

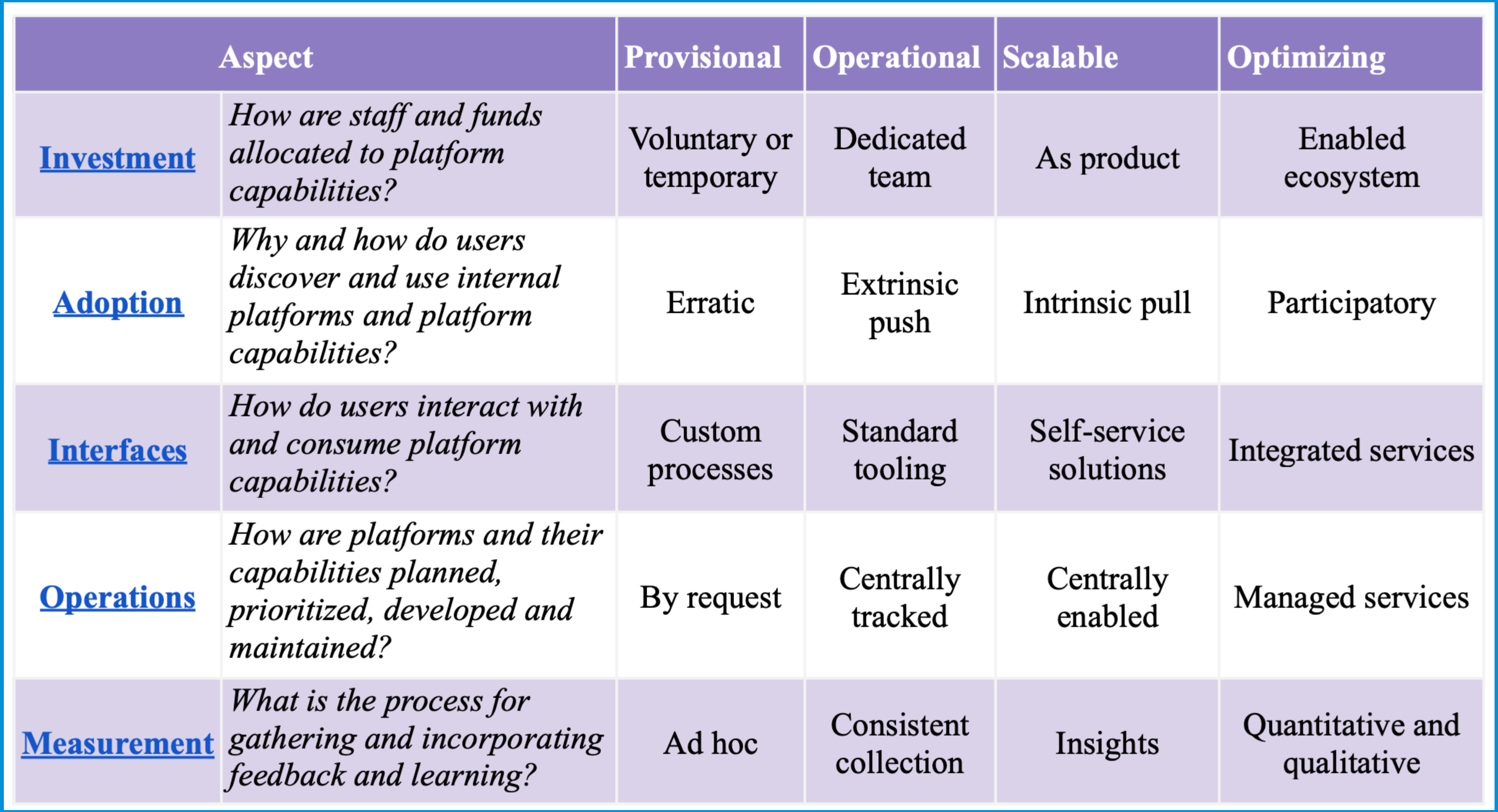
- We have grown from one engineer to a cross-functional team in our first year
- Engineering-facing teams are your partners, **portals exist everywhere**
- One team responsible for the portal is not enough, **expertise is around you**

Star growth metric that tells us what do we want to accomplish? Again, get jobs done. Of course, at bol, we know a lot about sales conversion, that kind of thing, so we were thinking in that realm, and we introduced something we now named "jobs done conversion", so that really is looking at that journey, really looking at tasks, completed by engineers and measuring debt, and also setting an ambition in that direction. Enough about value, a bit about viability from an organisational perspective

11:39 / 22:01

Source: "Platform Engineering at bol.: Unveiling Insights from Adopting a Web Portal,", Onno Ceelen and Roy Triesscheijn, DevOpsDays Amsterdam, 2024.

“Culture” is a 3 to 5 year journey



Aspect		Provisional	Operational	Scalable	Optimizing
Investment	*How are staff and funds allocated to platform capabilities?*	Voluntary or temporary	Dedicated team	As product	Enabled ecosystem
Adoption	*Why and how do users discover and use internal platforms and platform capabilities?*	Erratic	Extrinsic push	Intrinsic pull	Participatory
Interfaces	*How do users interact with and consume platform capabilities?*	Custom processes	Standard tooling	Self-service solutions	Integrated services
Operations	*How are platforms and their capabilities planned, prioritized, developed and maintained?*	By request	Centrally tracked	Centrally enabled	Managed services
Measurement	*What is the process for gathering and incorporating feedback and learning?*	Ad hoc	Consistent collection	Insights	Quantitative and qualitative

Sources: “Platform Engineering Maturity Model,” CNCF Platforms Working Group, October, 2023. See also “Cloud Native App Platforms: New Research Shows Struggles and Hope,” Camille Crowell-Lee and Rita Manachi, June, 2024. See also beta version of Cloud Native Maturity Model: Core content updates for v4.0 (#84) (6e03f6c).

"We are building this platform not for us, we are building it for Mercedes-Benz developers."

Thomas Müller, Mercedes-Benz

Find the Developer Toil, Confusion, Blockers

Find the Developer Toil, Confusion, Blockers

- What are we making?
- We have a strong vision for our product, and we're doing important work together every day to fulfill that vision.
- I have the context I need to confidently make changes while I'm working.
- I am proud of the work I have delivered so far for our product.
- I am learning things that I look forward to applying to future products.
- My workstation seems to disappear out from under me while I'm working.
- It's easy to get my workstation into the state I need to develop our product.
- What aspect of our workstation setup is painful?
- It's easy to run our software on my workstation while I'm developing it.
- I can boot our software up into the state I need with minimal effort.
- What aspect of running our software locally is painful? What could we do to make it less painful?
- It's easy to run our test suites and to author new ones.
- Tests are a stable, reliable, seamless part of my workflow.
- Test failures give me the feedback I need on the code I am writing.
- What aspect of production support is painful?
- We collaborate well with the teams whose software we integrate with.
- When necessary, it is within my power to request timely changes from other teams.
- I have the resources I need to test and code confidently against other teams' integration points.
- What aspect of integrating with other teams is painful?
- I'm rarely impacted by breaking changes from other tracks of work.
- We almost always catch broken tests and code before they're merged in.
- What aspect of committing changes is painful?
- Our release process (CI/CD) from source control to our story acceptance environment is fully automated.
- If the release process (CI/CD) fails, I'm confident something is truly wrong, and I know I'll be able to track down the problem.
- What aspect of our release process (CI/CD) is painful?
- Our team releases new versions of our software as often as the business needs us to.
- We are meeting our service-level agreements with a minimum of unplanned work.
- When something is wrong in production, we reproduce and solve the problem in a lower environment.

Sources: "Developer Toil: The Hidden Tech Debt," Susie Forbath, Tyson McNulty, and Coté, August, 2022. See also Michael Galloway's interview questions for platform product managers.

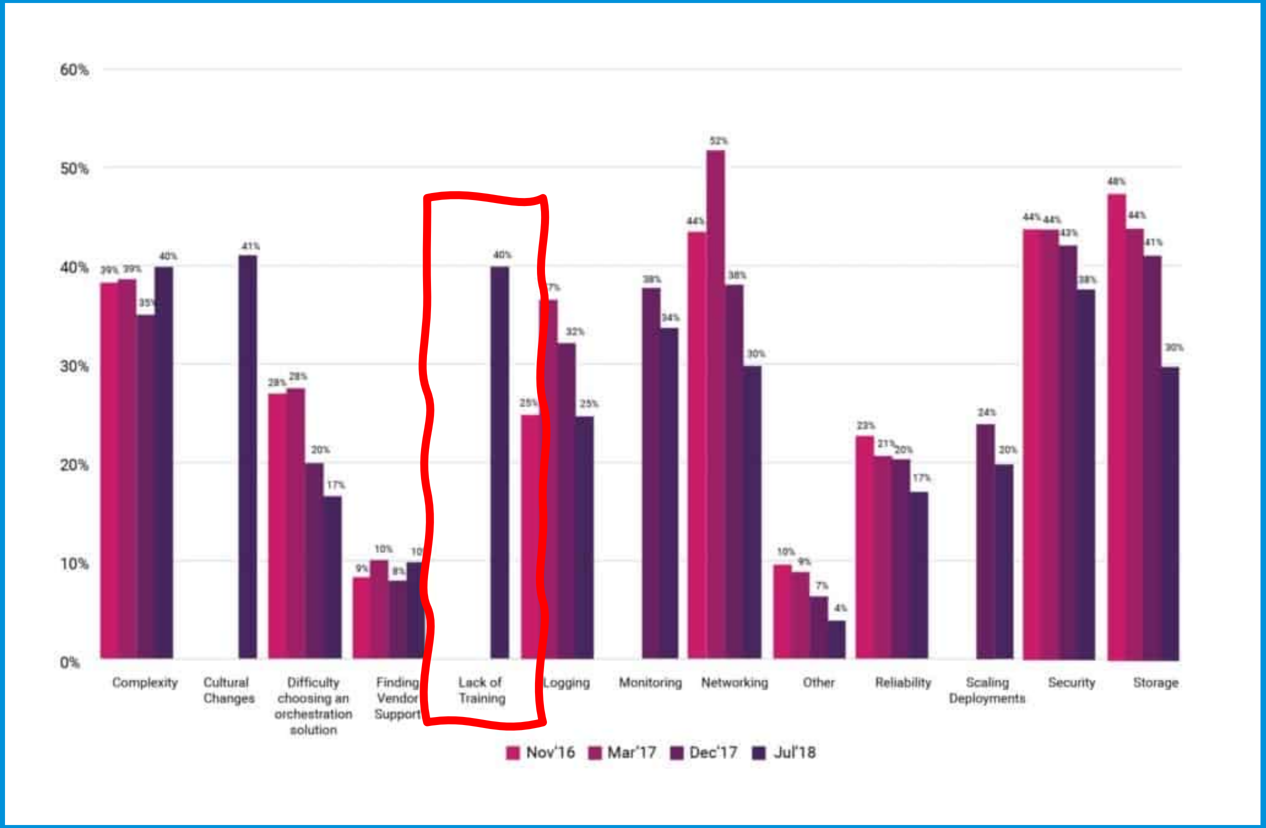
#4
Homegrown Lock-in

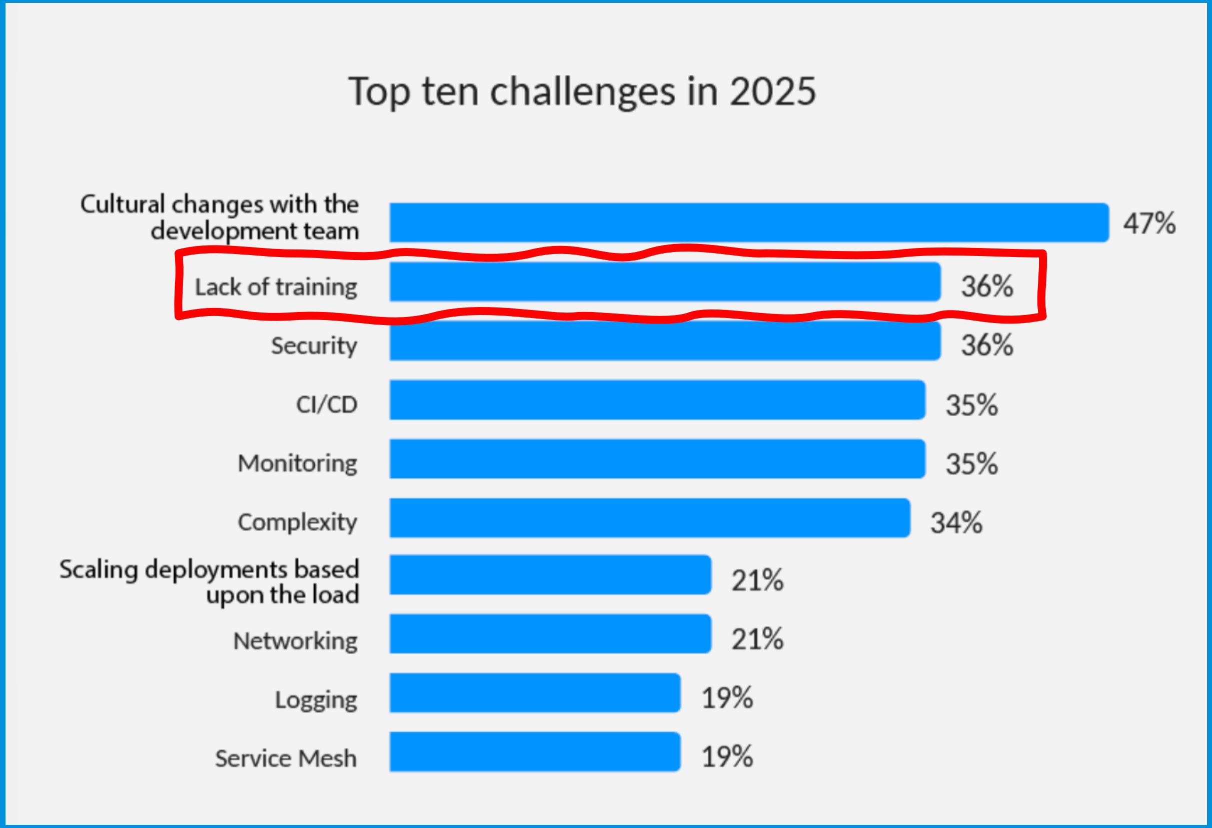
- The Freedom to Leave.
- Portability.
- Switching costs.

Sources: "Freedom To Leave," Simon Phipps, June, 2006; "Switching Costs and Lock-In," Mark Schwartz, December, 2018; "Thinking About VMware Alternatives?" Keith Townsend, August, 2025. See also "Don't get locked up into avoiding lock-in," Gregor Hohpe, September, 2019.

#5
Retaining skilled people

Lack of training, 2017 to 2025





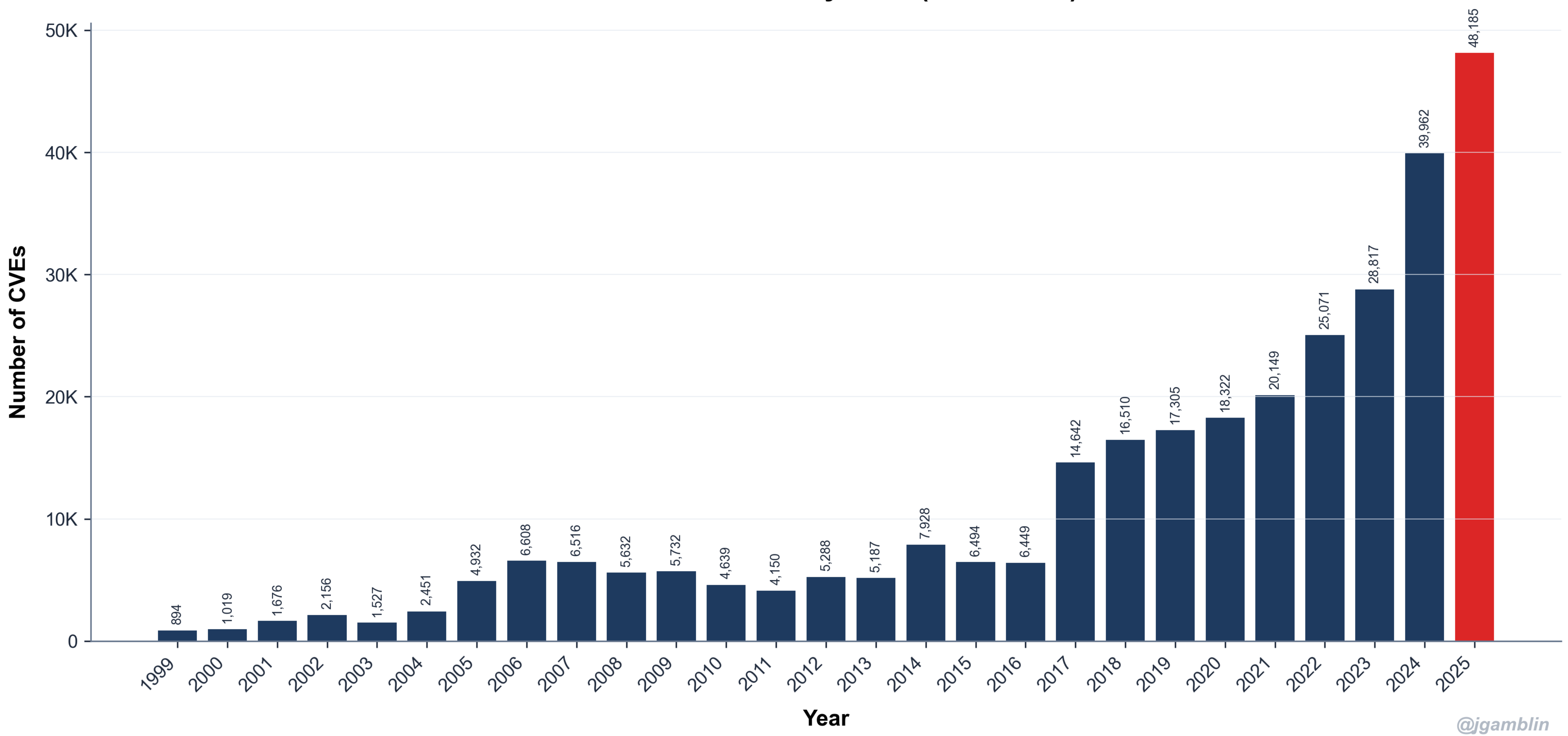
40% in 2017

36% in 2017

Sources: CNCF Survey, August, 2018; CNCF Survey, January, 2026 (for 2025).

#6
Keeping up with security & compliance

CVEs Published by Year (1999-2025)



Source: "2025 CVE Data Review," Jerry Gamblin, January 1st, 2026.

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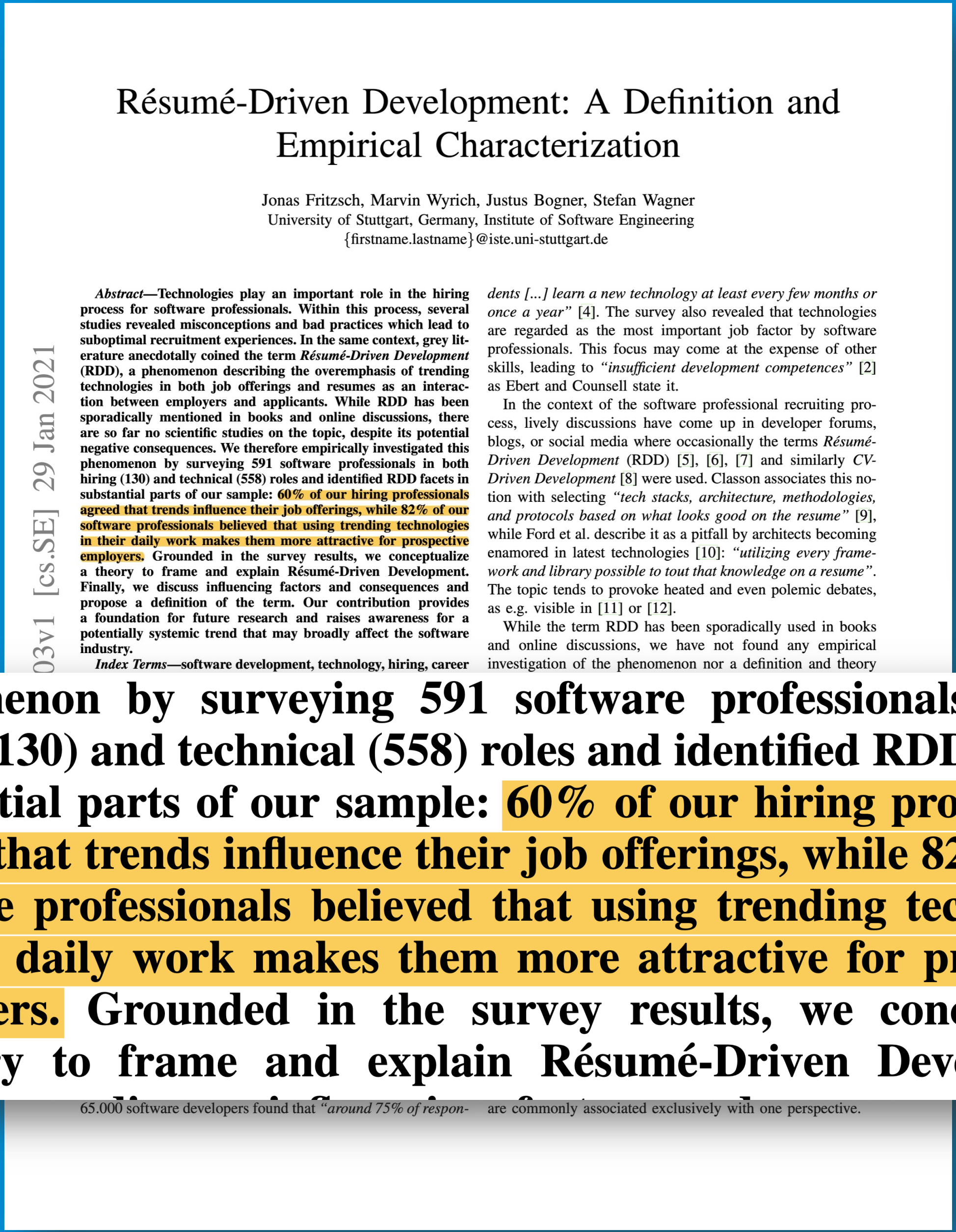
Source: AI generated Trump Cloud; "The Cloud Man," found on Whoopah.

#7
Resume-driven development



Résumé-Driven Development: A Definition and Empirical Characterization

Jonas Fritzsch, Marvin Wyrich, Justus Bogner, Stefan Wagner
University of Stuttgart, Germany, Institute of Software Engineering
{firstname.lastname}@iste.uni-stuttgart.de

***Abstract*—Technologies play an important role in the hiring process for software professionals. Within this process, several studies revealed misconceptions and bad practices which lead to suboptimal recruitment experiences. In the same context, grey literature anecdotally coined the term *Résumé-Driven Development* (RDD), a phenomenon describing the overemphasis of trending technologies in both job offerings and resumes as an interaction between employers and applicants. While RDD has been sporadically mentioned in books and online discussions, there are so far no scientific studies on the topic, despite its potential negative consequences. We therefore empirically investigated this phenomenon by surveying 591 software professionals in both hiring (130) and technical (558) roles and identified RDD facets in substantial parts of our sample: 60% of our hiring professionals agreed that trends influence their job offerings, while 82% of our software professionals believed that using trending technologies in their daily work makes them more attractive for prospective employers. Grounded in the survey results, we conceptualize a theory to frame and explain Résumé-Driven Development. Finally, we discuss influencing factors and consequences and propose a definition of the term. Our contribution provides a foundation for future research and raises awareness for a potentially systemic trend that may broadly affect the software industry.**

***Index Terms*—software development, technology, hiring, career**

65.000 software developers found that *"around 75% of respon-*

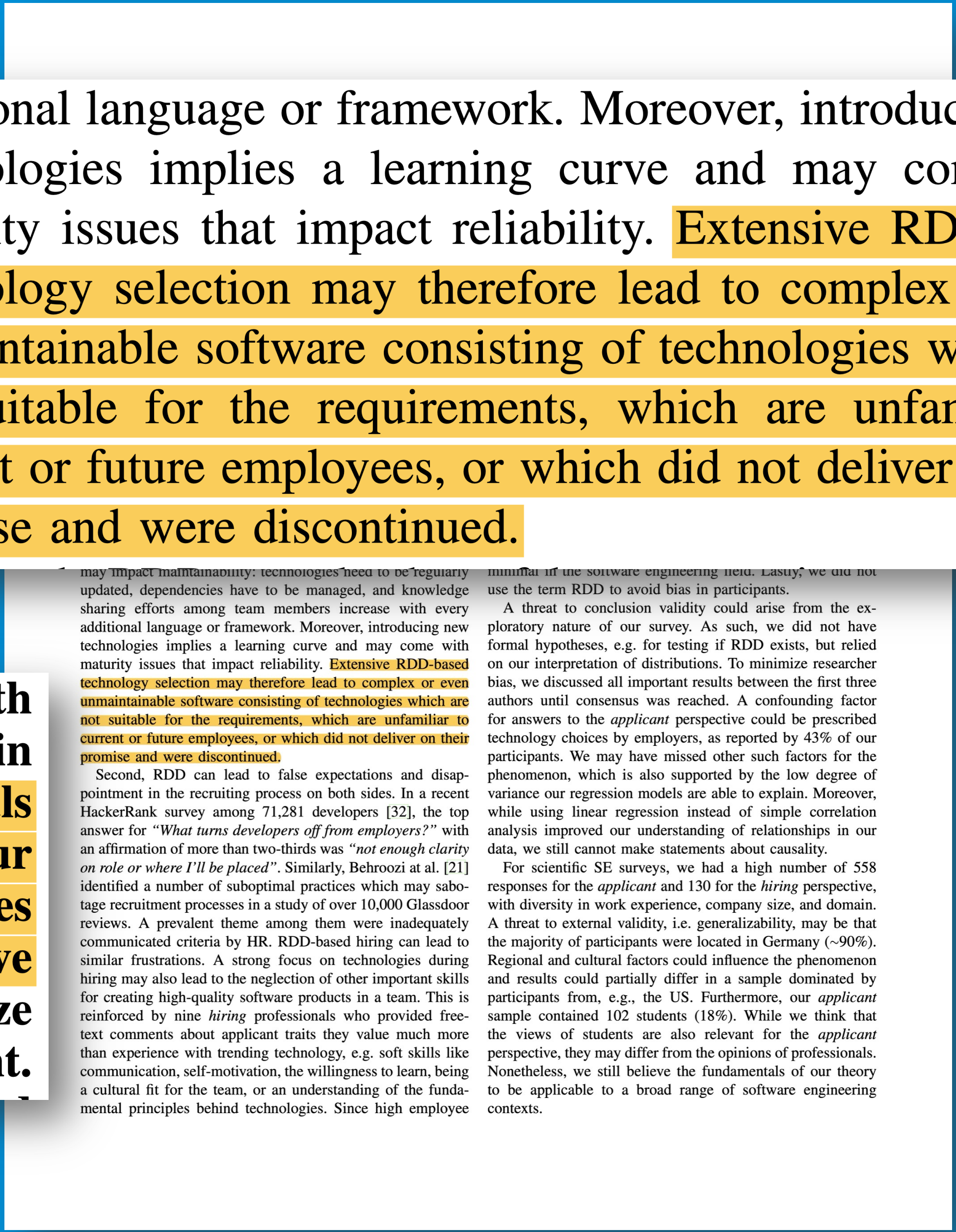
dents [...] learn a new technology at least every few months or once a year" [4]. The survey also revealed that technologies are regarded as the most important job factor by software professionals. This focus may come at the expense of other skills, leading to *"insufficient development competences"* [2] as Ebert and Counsell state it.

In the context of the software professional recruiting process, lively discussions have come up in developer forums, blogs, or social media where occasionally the terms *Résumé-Driven Development* (RDD) [5], [6], [7] and similarly *CV-Driven Development* [8] were used. Classon associates this notion with selecting *"tech stacks, architecture, methodologies, and protocols based on what looks good on the resume"* [9], while Ford et al. describe it as a pitfall by architects becoming enamored in latest technologies [10]: *"utilizing every framework and library possible to tout that knowledge on a resume"*. The topic tends to provoke heated and even polemic debates, as e.g. visible in [11] or [12].

While the term RDD has been sporadically used in books and online discussions, we have not found any empirical investigation of the phenomenon nor a definition and theory

are commonly associated exclusively with one perspective.

phenomenon by surveying 591 software professionals in both hiring (130) and technical (558) roles and identified RDD facets in substantial parts of our sample: 60% of our hiring professionals agreed that trends influence their job offerings, while 82% of our software professionals believed that using trending technologies in their daily work makes them more attractive for prospective employers. Grounded in the survey results, we conceptualize a theory to frame and explain Résumé-Driven Development.



additional language or framework. Moreover, introducing new technologies implies a learning curve and may come with maturity issues that impact reliability. Extensive RDD-based technology selection may therefore lead to complex or even unmaintainable software consisting of technologies which are not suitable for the requirements, which are unfamiliar to current or future employees, or which did not deliver on their promise and were discontinued.

may impact maintainability: technologies need to be regularly updated, dependencies have to be managed, and knowledge sharing efforts among team members increase with every additional language or framework. Moreover, introducing new technologies implies a learning curve and may come with maturity issues that impact reliability. Extensive RDD-based technology selection may therefore lead to complex or even unmaintainable software consisting of technologies which are not suitable for the requirements, which are unfamiliar to current or future employees, or which did not deliver on their promise and were discontinued.

Second, RDD can lead to false expectations and disappointment in the recruiting process on both sides. In a recent HackerRank survey among 71,281 developers [32], the top answer for *"What turns developers off from employers?"* with an affirmation of more than two-thirds was *"not enough clarity on role or where I'll be placed"*. Similarly, Behroozi at al. [21] identified a number of suboptimal practices which may sabotage recruitment processes in a study of over 10,000 Glassdoor reviews. A prevalent theme among them were inadequately communicated criteria by HR. RDD-based hiring can lead to similar frustrations. A strong focus on technologies during hiring may also lead to the neglection of other important skills for creating high-quality software products in a team. This is reinforced by nine *hiring* professionals who provided free-text comments about applicant traits they value much more than experience with trending technology, e.g. soft skills like communication, self-motivation, the willingness to learn, being a cultural fit for the team, or an understanding of the fundamental principles behind technologies. Since high employee

minimal in the software engineering field. Lastly, we did not use the term RDD to avoid bias in participants.

A threat to conclusion validity could arise from the exploratory nature of our survey. As such, we did not have formal hypotheses, e.g. for testing if RDD exists, but relied on our interpretation of distributions. To minimize researcher bias, we discussed all important results between the first three authors until consensus was reached. A confounding factor for answers to the *applicant* perspective could be prescribed technology choices by employers, as reported by 43% of our participants. We may have missed other such factors for the phenomenon, which is also supported by the low degree of variance our regression models are able to explain. Moreover, while using linear regression instead of simple correlation analysis improved our understanding of relationships in our data, we still cannot make statements about causality.

For scientific SE surveys, we had a high number of 558 responses for the *applicant* and 130 for the *hiring* perspective, with diversity in work experience, company size, and domain. A threat to external validity, i.e. generalizability, may be that the majority of participants were located in Germany (~90%). Regional and cultural factors could influence the phenomenon and results could partially differ in a sample dominated by participants from, e.g., the US. Furthermore, our *applicant* sample contained 102 students (18%). While we think that the views of students are also relevant for the *applicant* perspective, they may differ from the opinions of professionals. Nonetheless, we still believe the fundamentals of our theory to be applicable to a broad range of software engineering contexts.

Sources: "Resume-Driven Development: A Definition and Empirical Characterization," Jonas Fritzsch, Marvin Wyrich, Justus Bogner, Stefan Wagner, January, 2021.

Hamsterééééén
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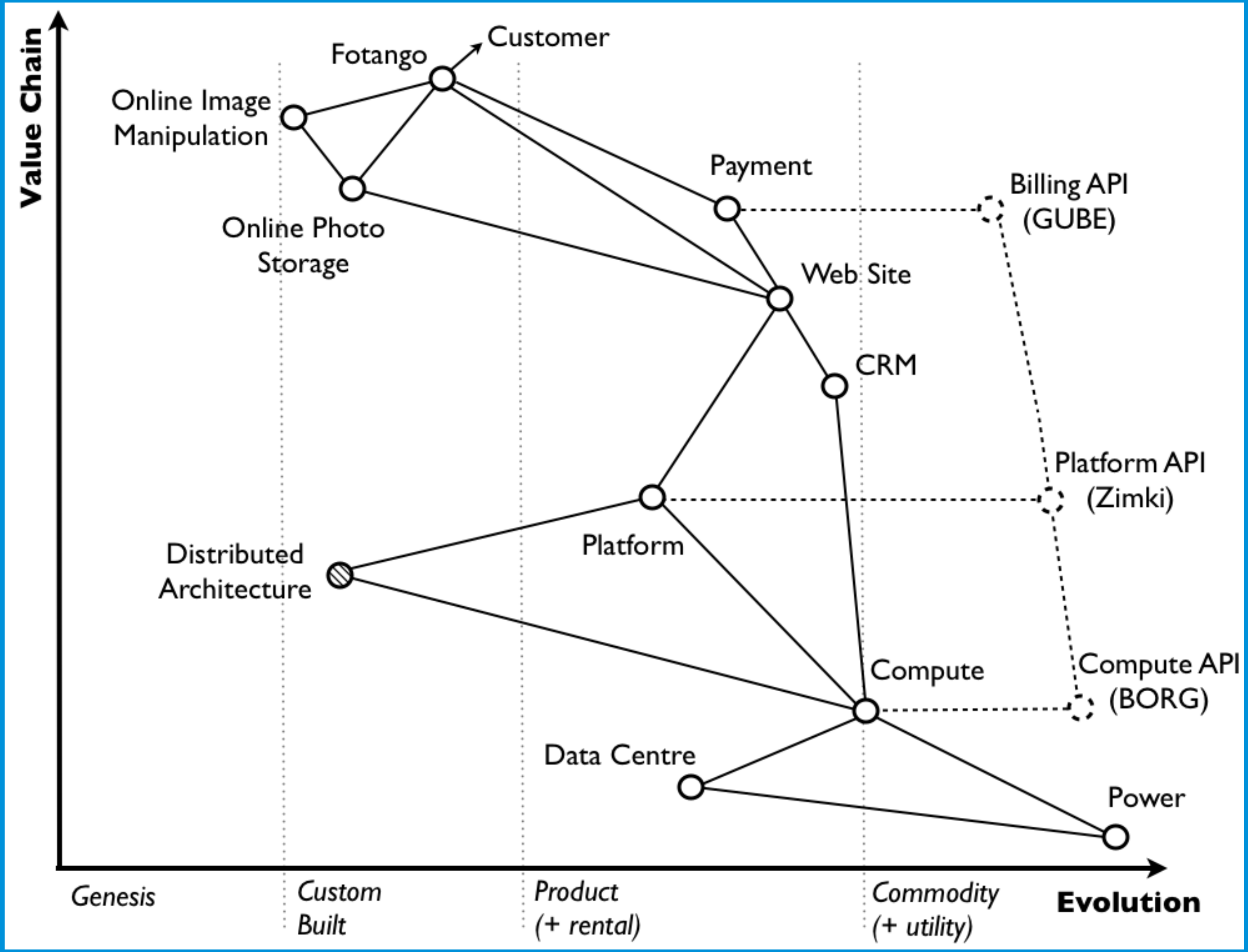

Sources: "A first map," Simon Wardley, January, 2013.

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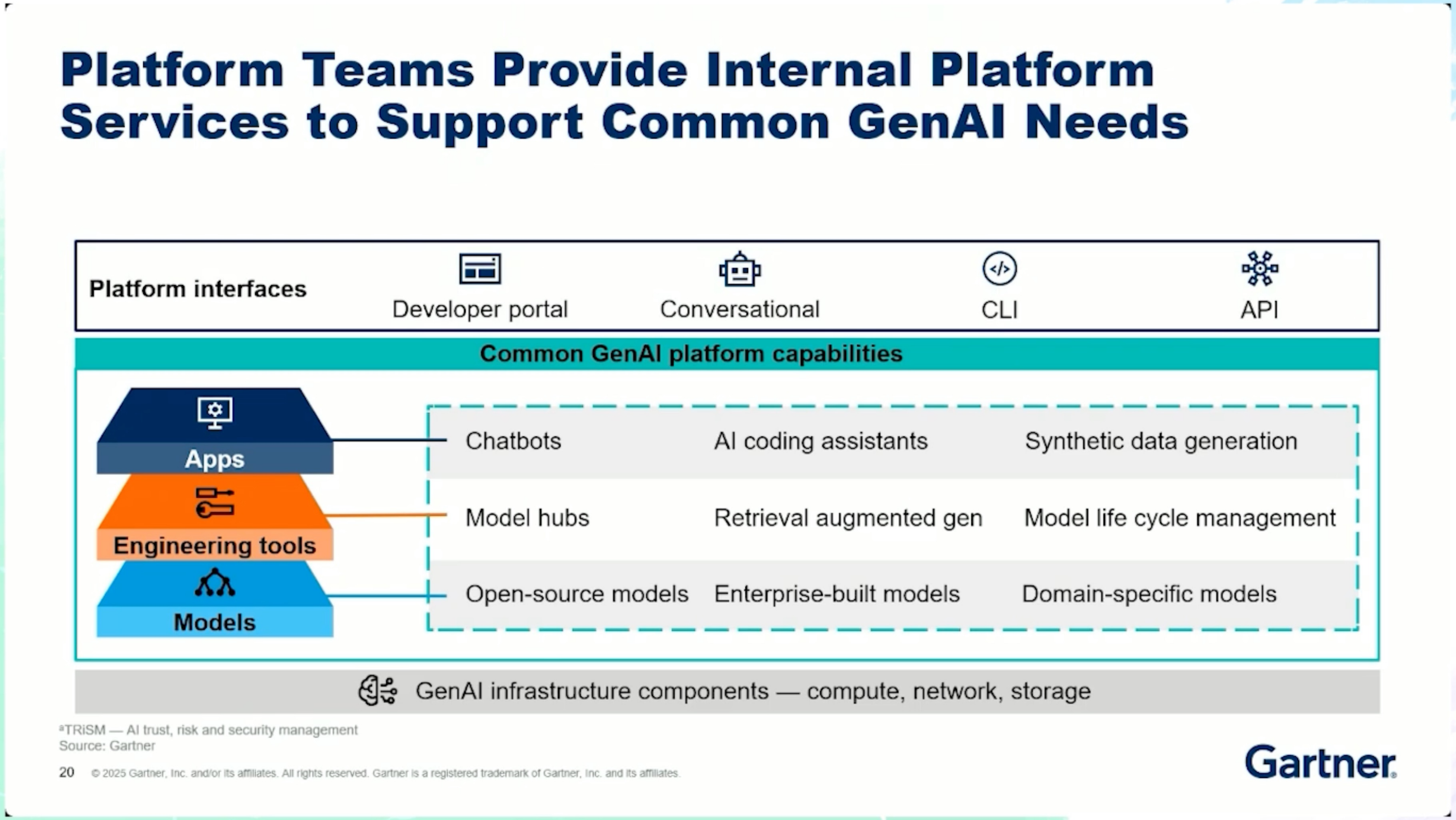
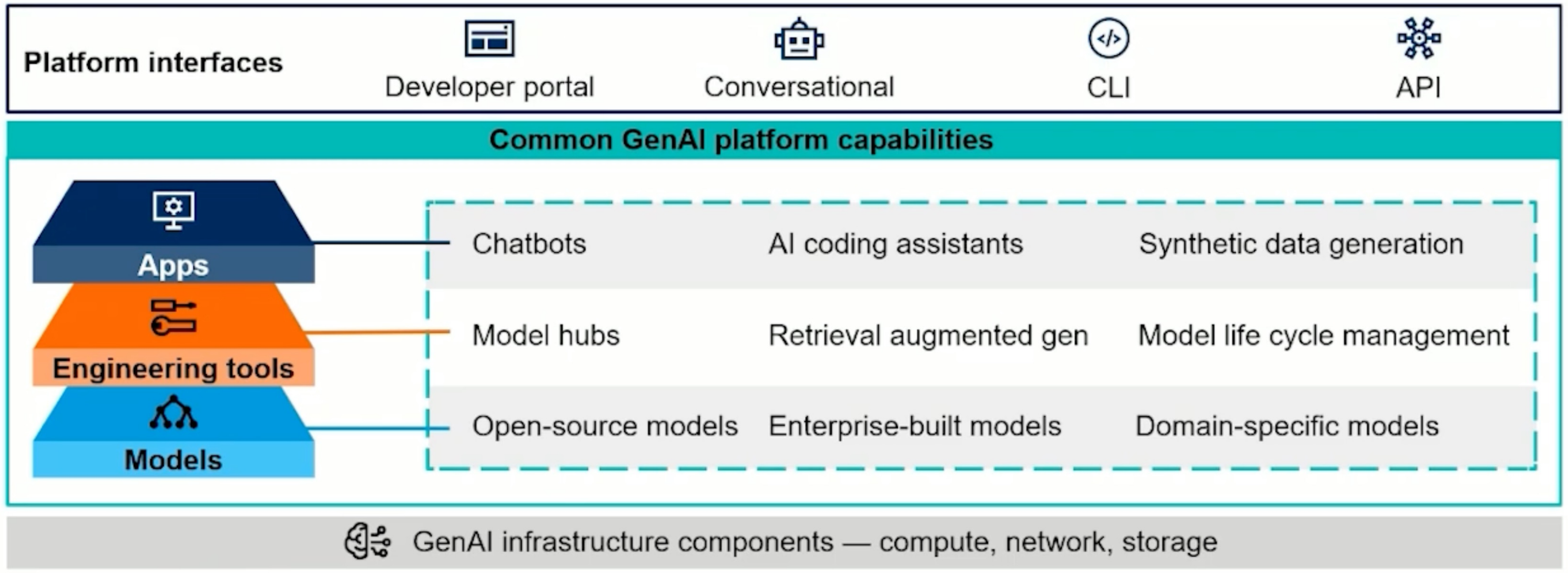


Platform Teams Provide Internal Platform Services to Support Common GenAI Needs



ªTRiSM — AI trust, risk and security management
Source: Gartner

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Gartner

Manjunath Bhat

Research VP, Gartner

IMPACT

Source: "How platform teams can help scale generative AI application delivery," Manjunath Bhat, Gartner, PlatformCon 2025, June, 2025.

“Don’t build something if you can buy it.”

Sarah Wells, formally at FT, August, 2024.

“Do not blindly start with Kubernetes. Seriously. If your application can get by with a simple PaaS or Serverless offering I’d consider that first. Even VMs make sense for most situations.”

Kelsey Hightower, Autum, 2025

“It’s not about rebuilding what we can purchase that is available on the market. It’s about making sure we spend our time building the things that are bespoke and important for our organization.

Abby Bangser, Syntaso, November 2025.

“Buy everything you can.”

Abby Bangser, Syntaso, November, 2025.

Stop building platforms.

Start building apps.

Thanks!

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Slides & stuff