

The confusing case of cloud app domicilicity

Coté – February 4th, 2025





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@cote

1

For those sensitive to enterprise bullshit

⚠️ CONTENT WARNING



Assaf



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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.

8

4



**We're early into
the first inning
of the
cloud marathon.**

“[T]his is just the bottom of the first inning.”

Peder Ulander, Cloud.com, July, 2010

“We’re Really in the First Inning’ of Cloud Computing.”

Frederic Kerrest, Okta, 2016

“A common belief among analysts is that the industry is still in its early days of cloud adoption.”

John Webster, February, 2021

“The cloud game is like a nine-inning baseball game and we’re in the first inning and there are two outs.”

Patrick Harr, HP, April 2011

“It’s still really early days.”

Andy Jassy, AWS CEO, March 2019

“[Y]ou’re three steps in, and it’s a 10K race”

Adam Selipsky, then AWS CEO, June 2023

“Cloud is probably in its fifth inning.”

Arvind Krishna, IBM, October, 2023

“It’s only the early innings for cloud computing.”

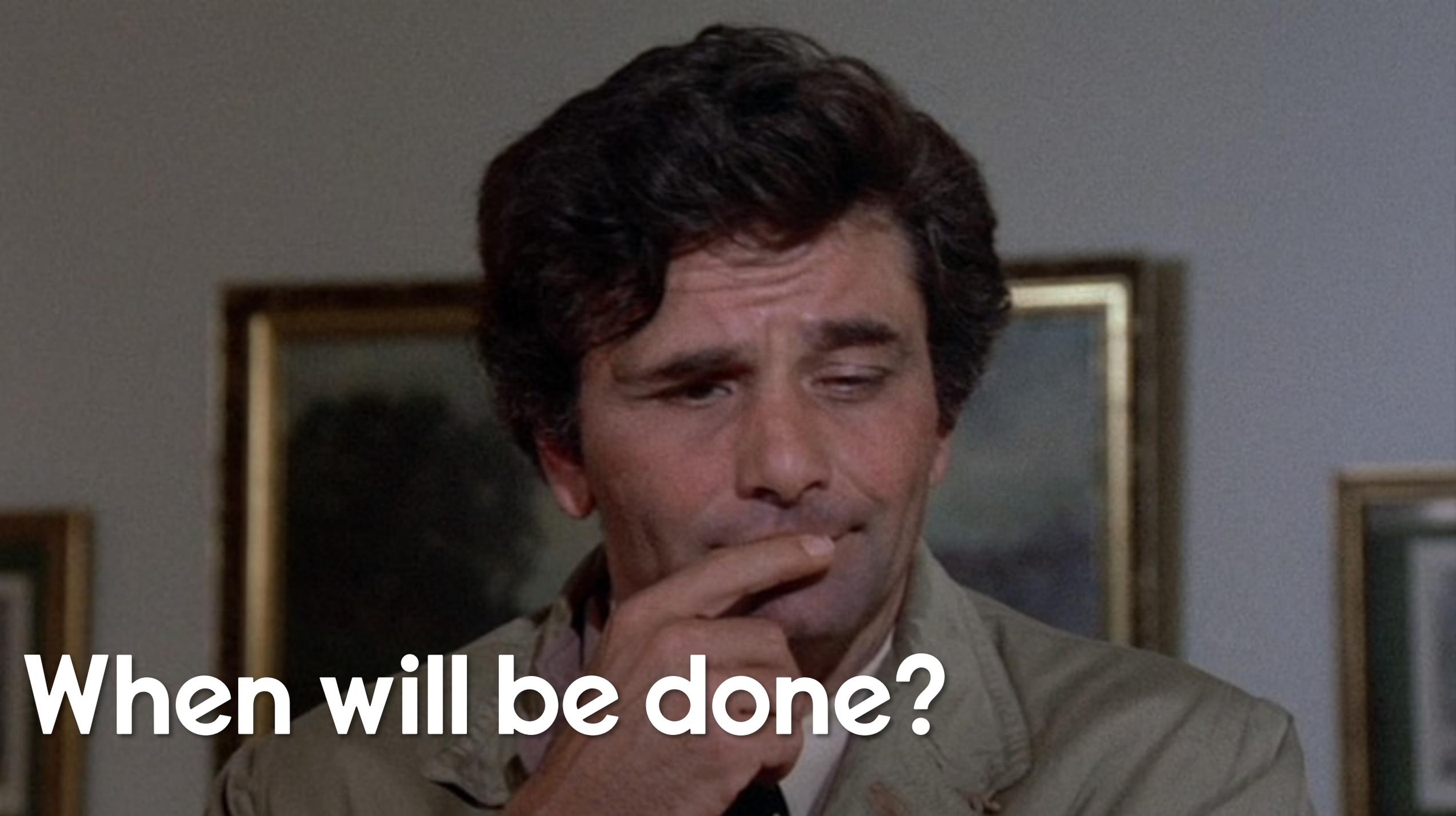
Bryan Borzykowski, MorningStar, August 2017

“There’s still a lot of growth ahead, with just 4% of total IT spending currently on the cloud.”

Jeff Barr summarizing Andy Jassy, AWS CEO, March 2020

“[W]e’re just at the early stages of what that business can be.”

Matt Garman, AWS CEO, January 2025

A man with dark, wavy hair, wearing a light-colored suit jacket, is shown in a close-up shot. He has a thoughtful expression, with his right hand resting against his chin. The background is a plain wall with several framed pictures or paintings. The lighting is soft and indoor.

When will be done?

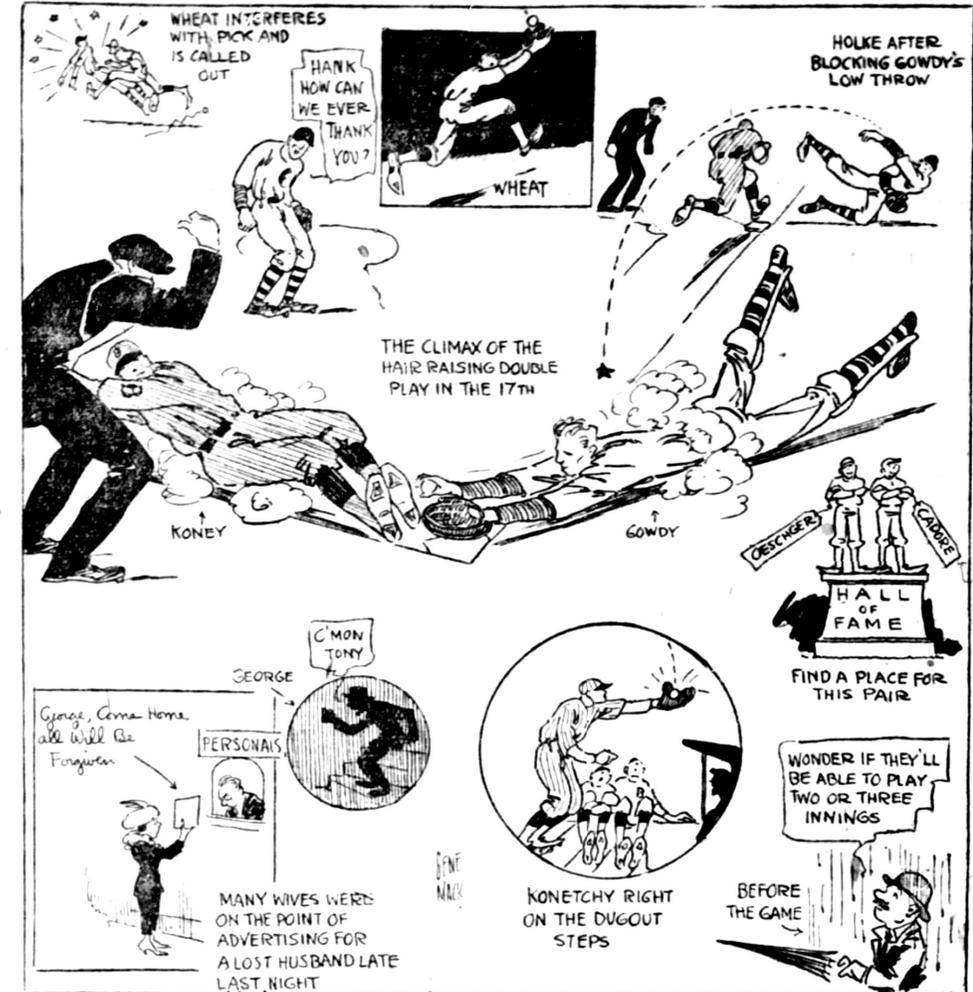
Standard # of innings:

9

Longest ever # (1920):

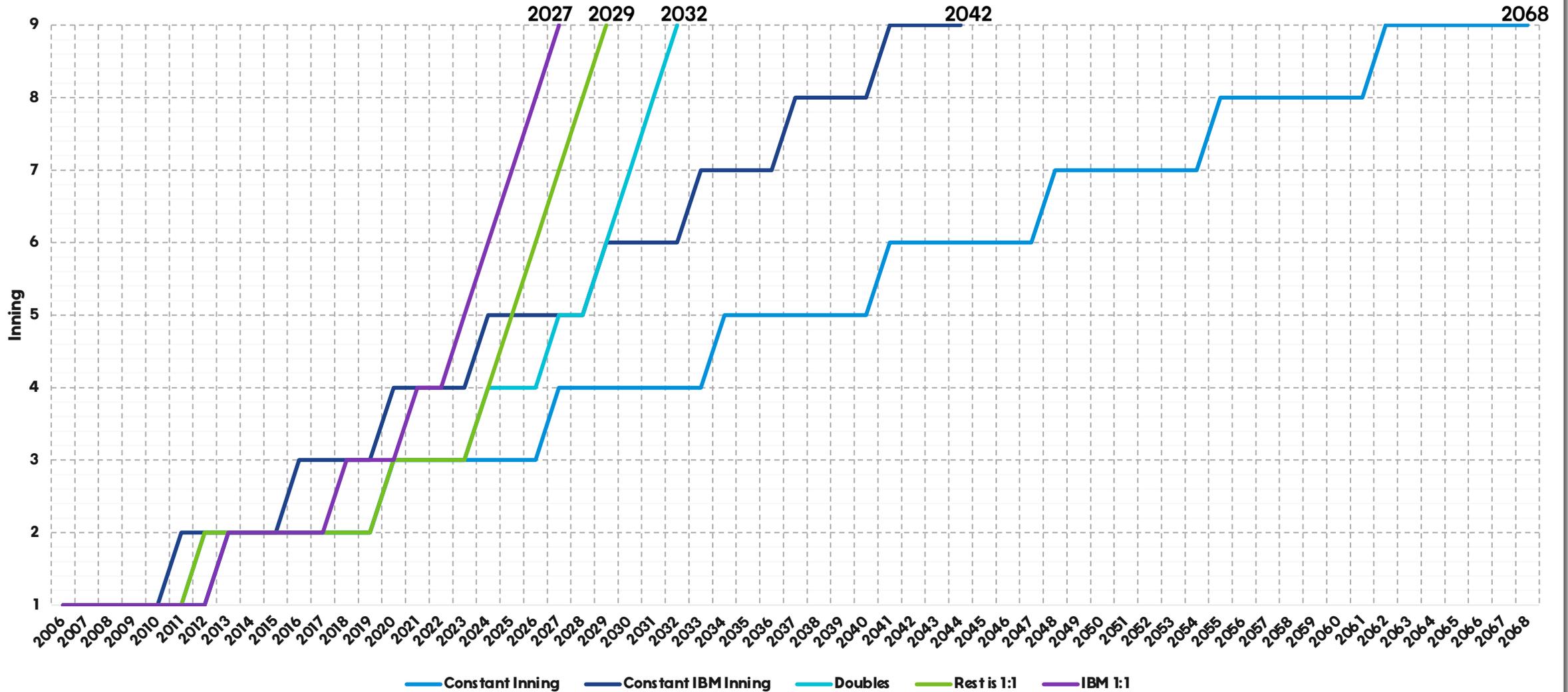
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**SOME GAME! THAT 26 INNING BATTLE IN WHICH
BRAVES AND DODGERS EACH SCORED ONE LONE RUN**



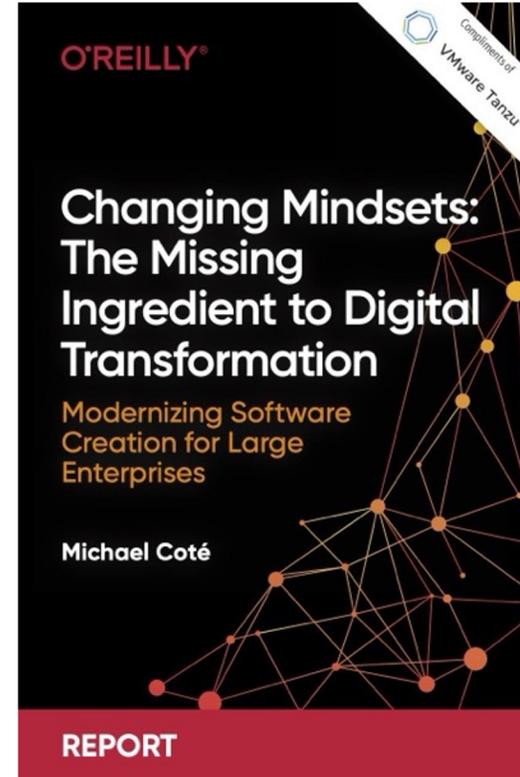
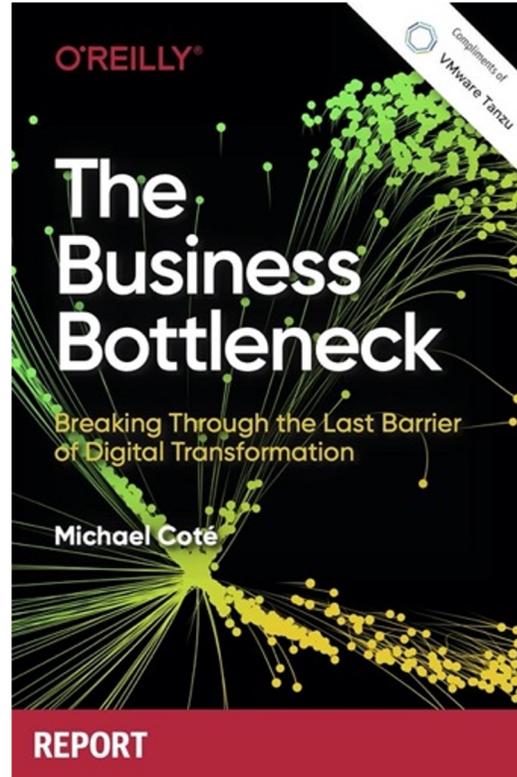
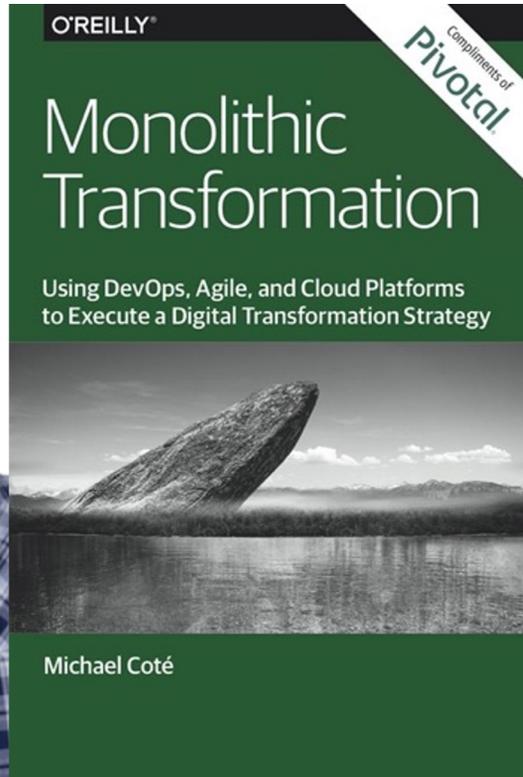
When will the cloud baseball game end?

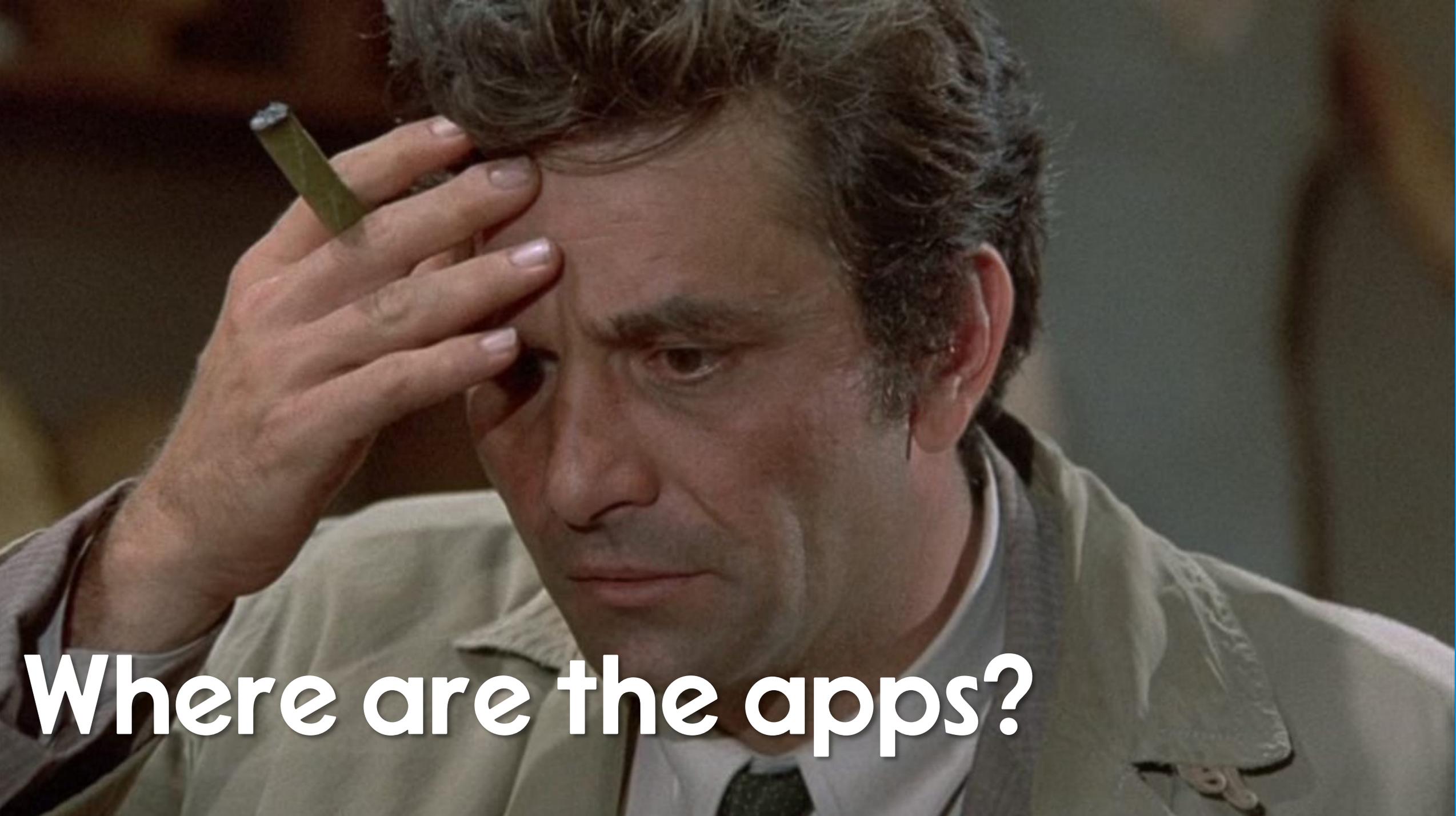
(Assumes 9 inning game, no overtime)



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Where are the apps?

Where are the apps?

“[W]e do have a lot of large customers that are running in AWS in the cloud today, and a huge number of them still have massive amounts of their estate on-premise. And so there’s a huge amount of growth available there. You can even take

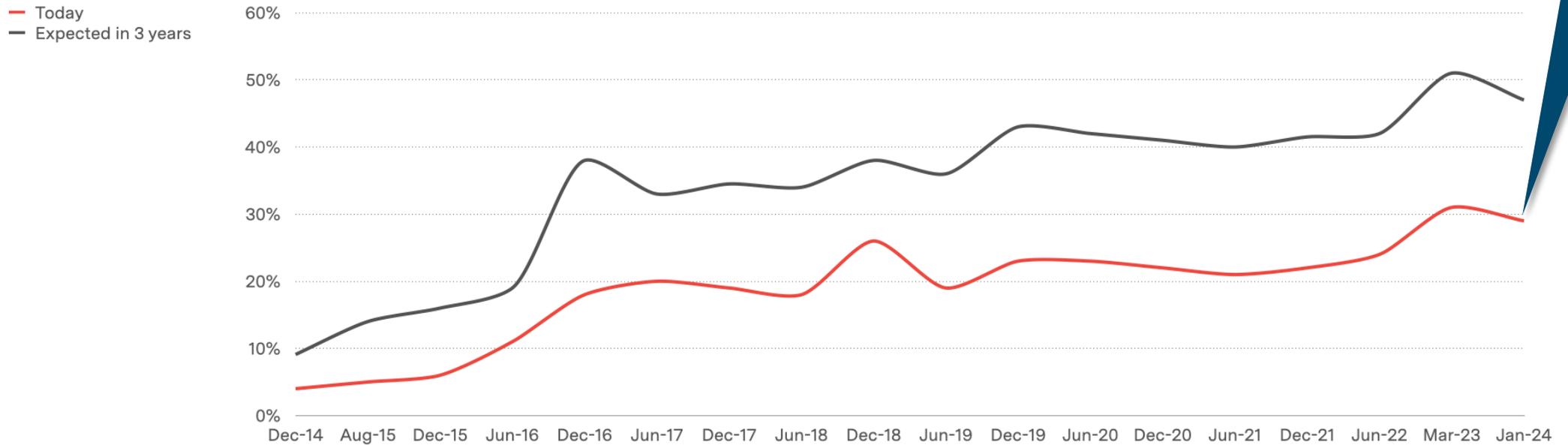
our largest customers, many of them only have 10, 20, 30, or 40 percent of their workloads in the cloud.”

Matt Garman, AWS CEO, January, 2025

Remember, the future can take a long time

Cloud is old and boring - and still in the early stages

Enterprise workloads in public cloud



Thus:
70%ish
private cloud

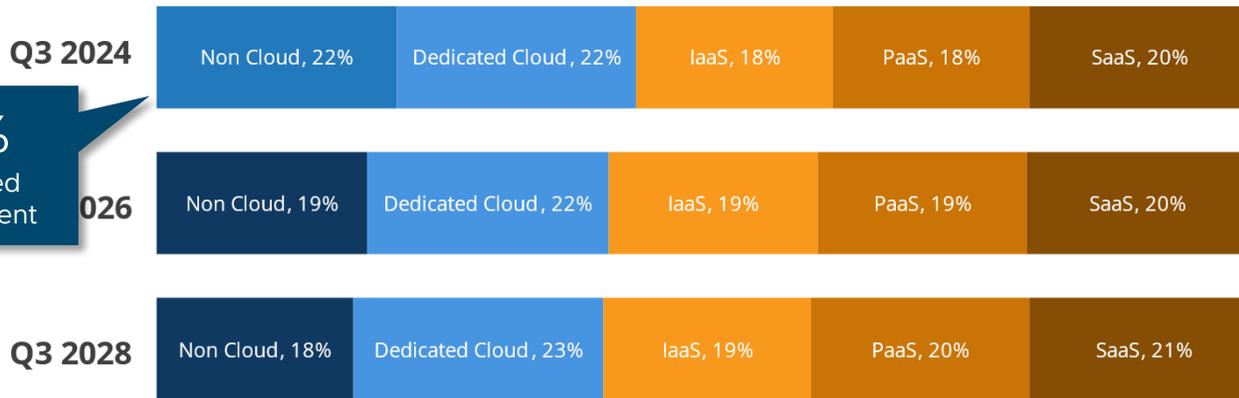
Source: Goldman Sachs CIO Survey

Benedict Evans -- July 2024

6

Cloud buyers increased their level of cross-platform interoperability in 2024. They also relied more upon providers for the management of their IT environments

Where are all your organizations applications deployed?



44%
dedicated environment

Level of Interoperability Between Clouds

Public Cloud	41%	Hosted Dedicated Cloud
On Prem Dedicated Cloud	39%	Public Cloud
Hosted Dedicated Cloud	38%	On Prem Dedicated Cloud
Public Cloud	38%	Public Cloud

HOW THE EDGE IS MANAGED

IAAS EDGE

- 49% of IaaS deployments are considered as remote of edge deployments

DEDICATED EDGE

- 48% of dedicated cloud environments are classified as remote or edge deployments.



N = 1,724, QC6 Source: QDV1 3Q24 Cloud Pulse Survey, October 2024, IDC

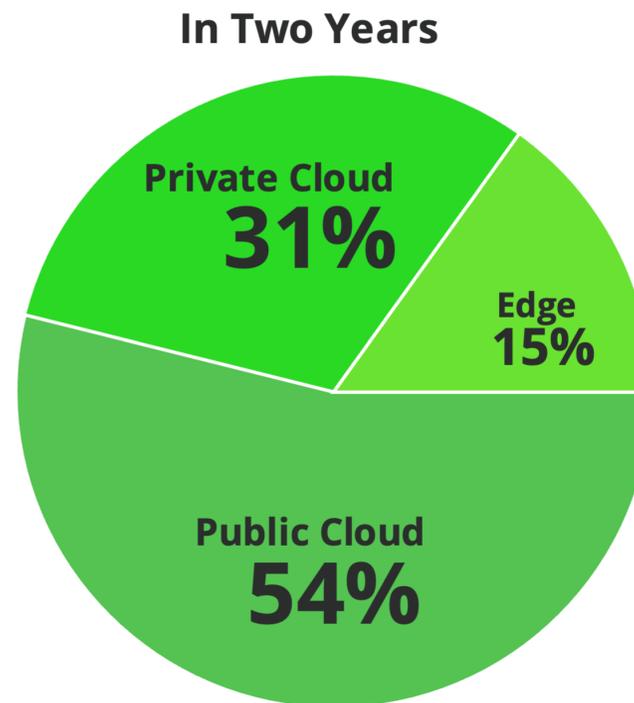
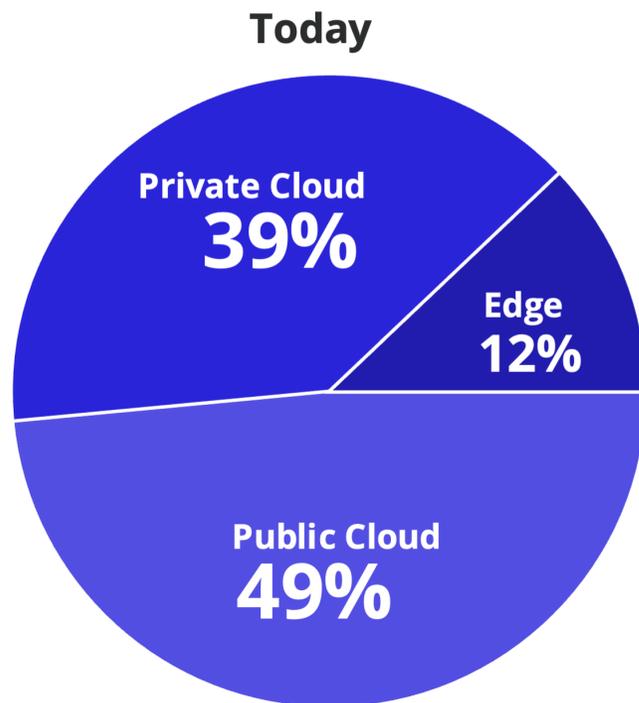
IDC Survey Spotlight

Q2. What is the approximate percentage of your production workloads by location and in two years? How many public cloud providers does your enterprise utilize?

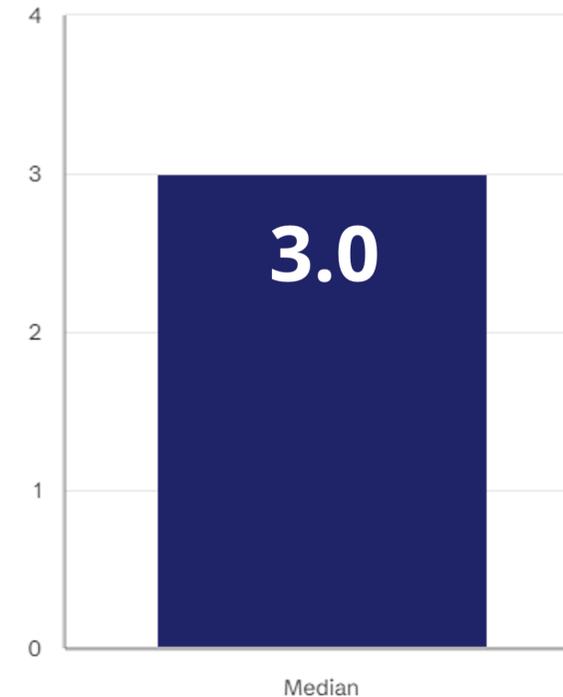


Jevin Jensen

Production workloads continue to be run in hybrid environments today and into future.



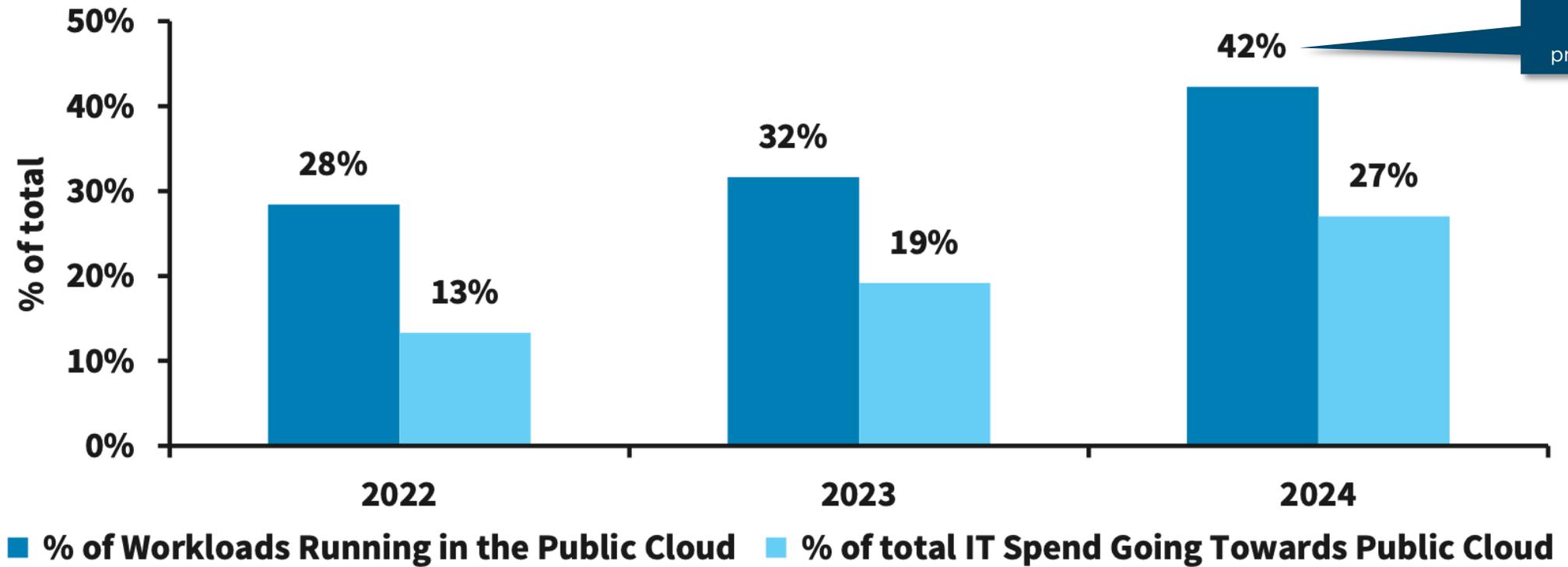
Public Cloud Providers Today



IDC #US52666224 (October 2024)
Source: US - Intelligent Cloud Operations Survey 2024, IDC, September 2024. n = 104

© IDC | 1

FIGURE 24. Barclays CIO Survey – Percentage of Workloads and Spend Going To the Public Cloud



Thus:
58%
private cloud

Source: Barclays CIO Survey program.

Summary

44%

dedicated environment

IDC, 2024

70%

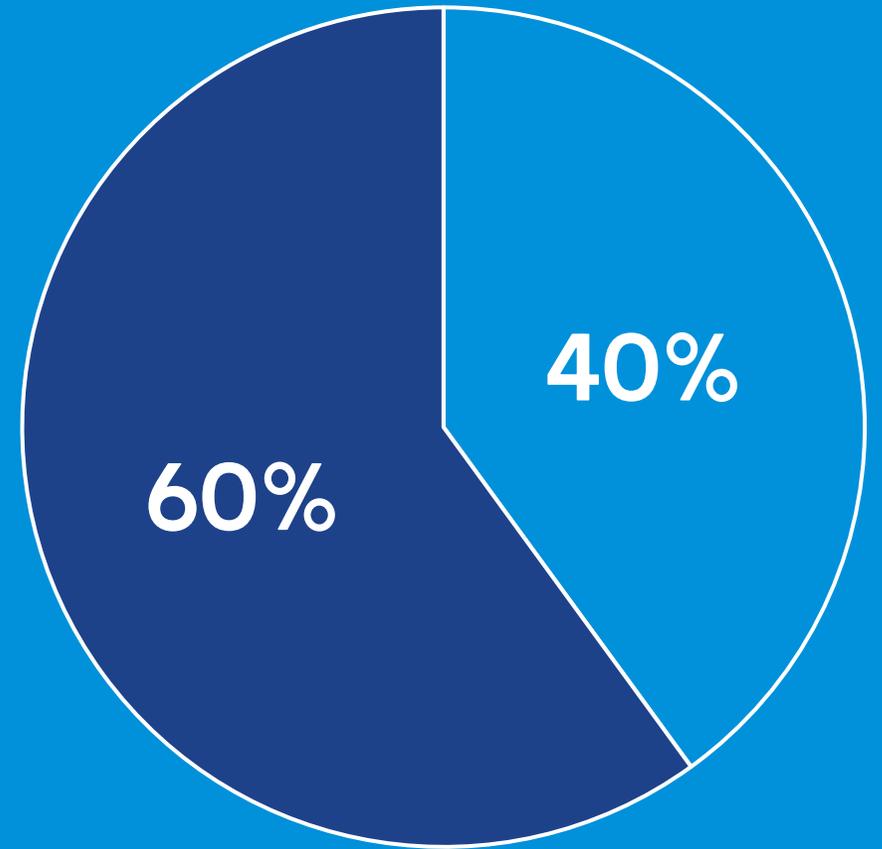
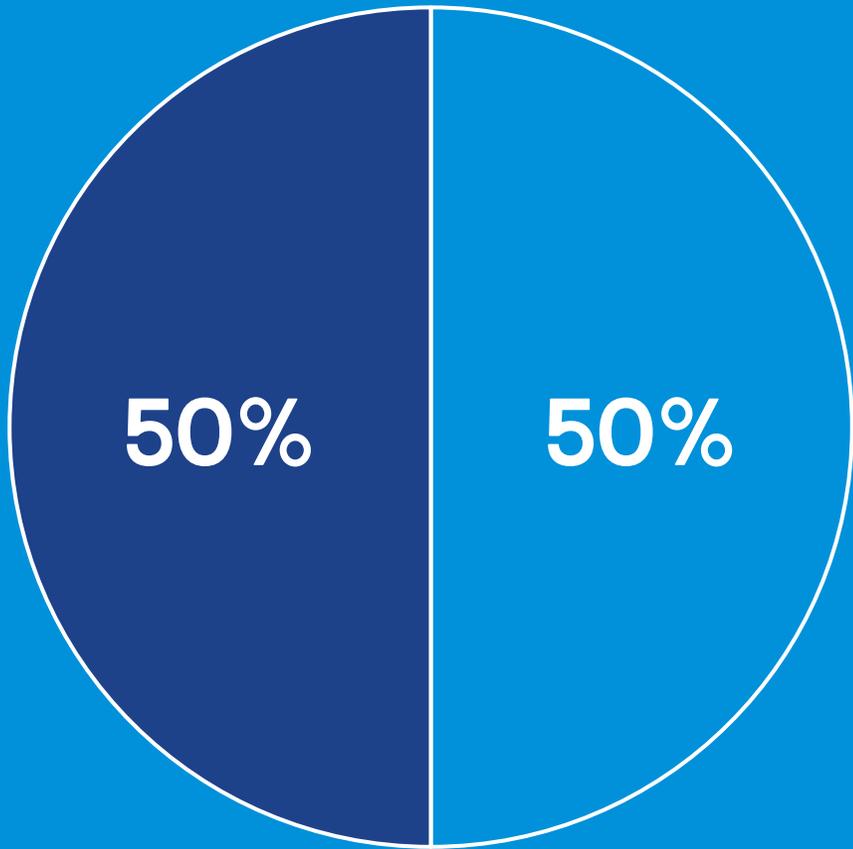
Goldman, 2024

58%

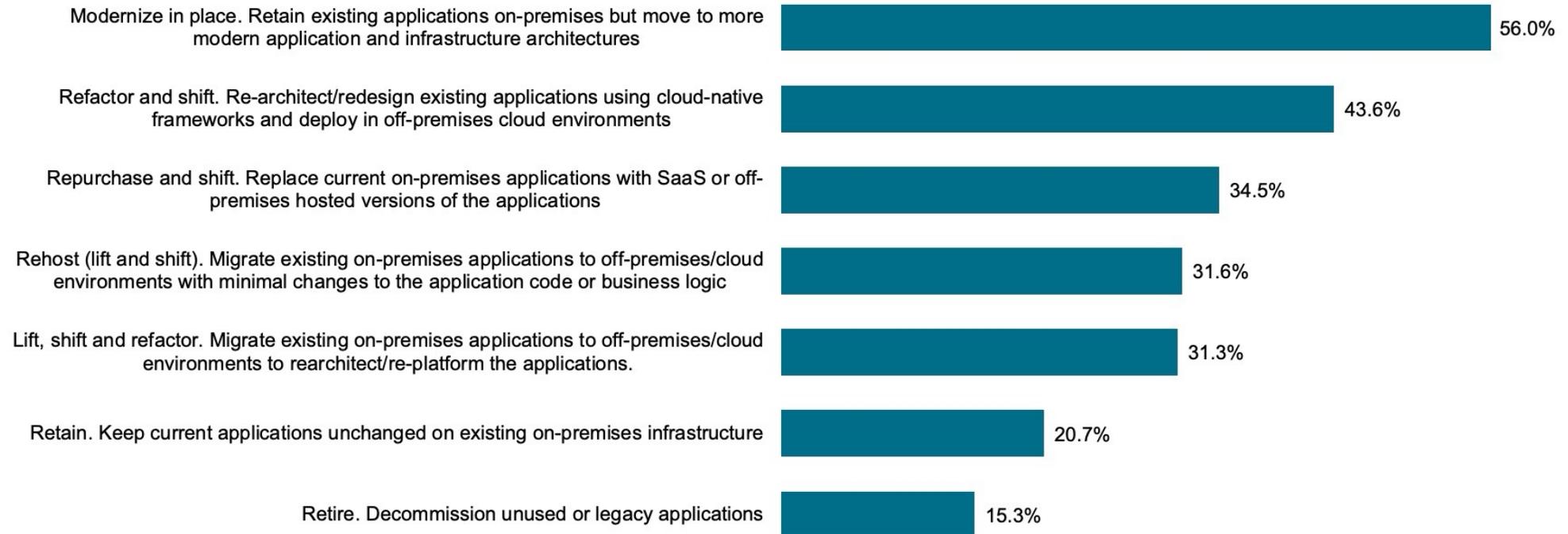
Barclays, 2024

Average is 55.75%. Sources: Goldman Sachs CIO Surveys, curated by [Benedict Evans](#) in "The AI Summer," July, 2024; IDC, IDC Cloud Pulse, 3Q24: Executive Summary – Vendor Perception, doc #US51134624, December 2024; "IH24 CIO Survey: 2024 Outlook Sustained," Barclays, April, 2024. n=100, 94% were CIOs, NA and EMEA, 7% tech companies.

Where the workloads live, rough estimates



Which of the following approaches are or will be part of your organization's ongoing approach to application modernization. Please select all that apply.



Q. Which of the following approaches are or will be part of your organization's ongoing approach to application modernization. Please select all that apply.

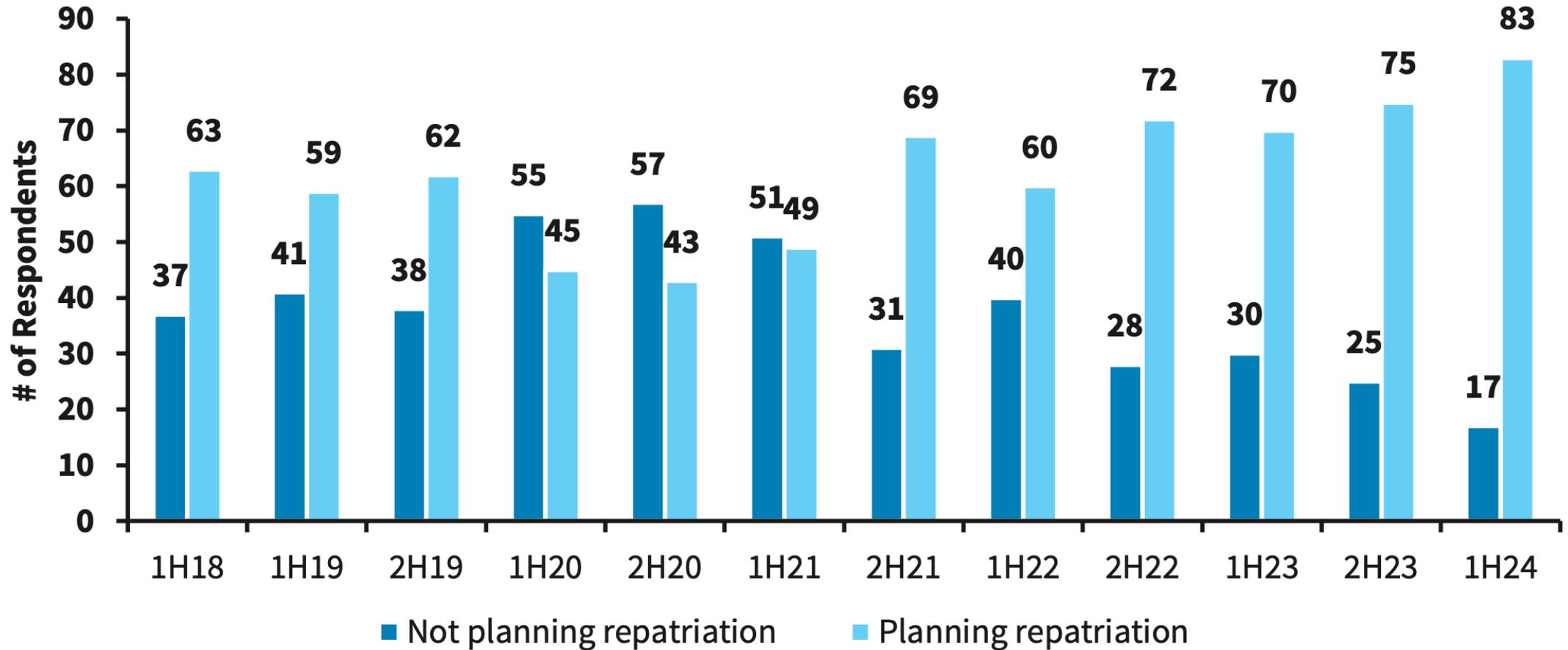
Base: Current or future public cloud users (n=275)

Source: 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Application Modernization 2024

A man with dark, wavy hair, wearing a light-colored trench coat over a white shirt and a dark tie, is sitting in a chair. He has a thoughtful or slightly stressed expression, with his right hand resting on his forehead. The background is a plain, light-colored wall with a framed picture partially visible on the right.

Do the apps stay put?

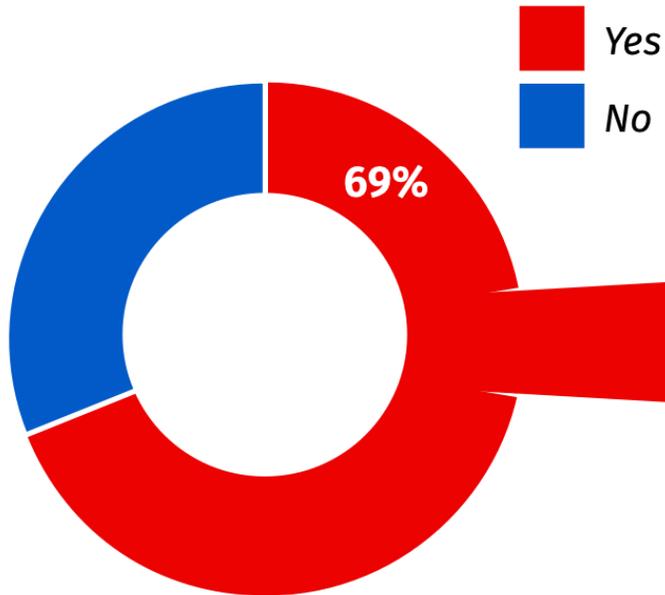
FIGURE 20. Barclays CIO Survey – Percentage of Respondents Planning to Move Workloads Back on to Private Cloud / On-Premise from Public Cloud



Source: Barclays CIO Survey program.

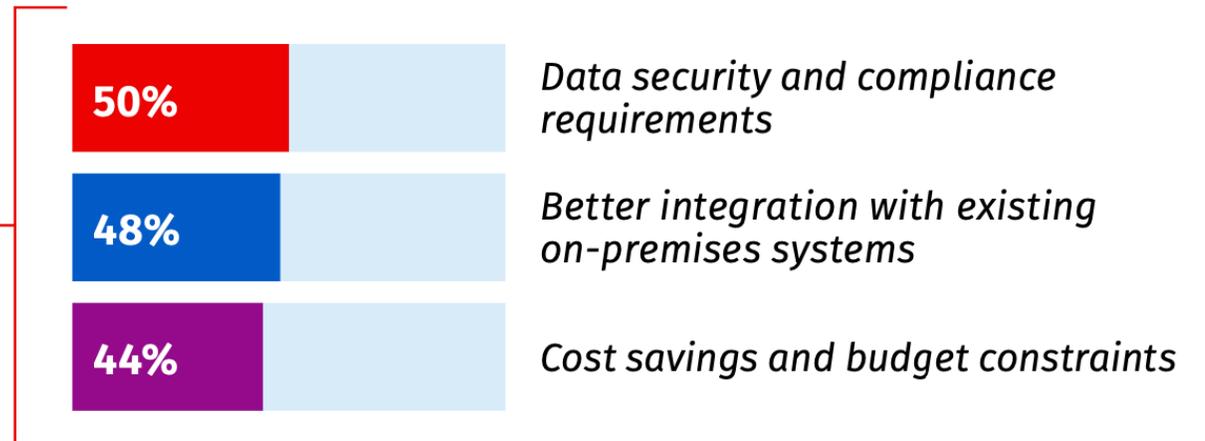
Repatriating workloads

Has your organization ever **considered** repatriating workloads from the cloud back to private cloud and/or on-premises?



Repatriation drivers

What are the primary reasons (or primary concerns) driving your organization's decision to repatriate workloads from the cloud back to on-premises?



“According to IDC’s Server and Storage Workloads Survey, only 8-9% of companies plan full workload repatriation.”



Public Cloud

Scalability and Flexibility

Cost Efficiency

Enhanced Security and Compliance

Global Reach and Accessibility

Disaster Recovery and Business

Access to Advanced Technologies

Focus on Core Competencies

Private Cloud

Performance Optimization

Cost Predictability

Enhanced Security and Control

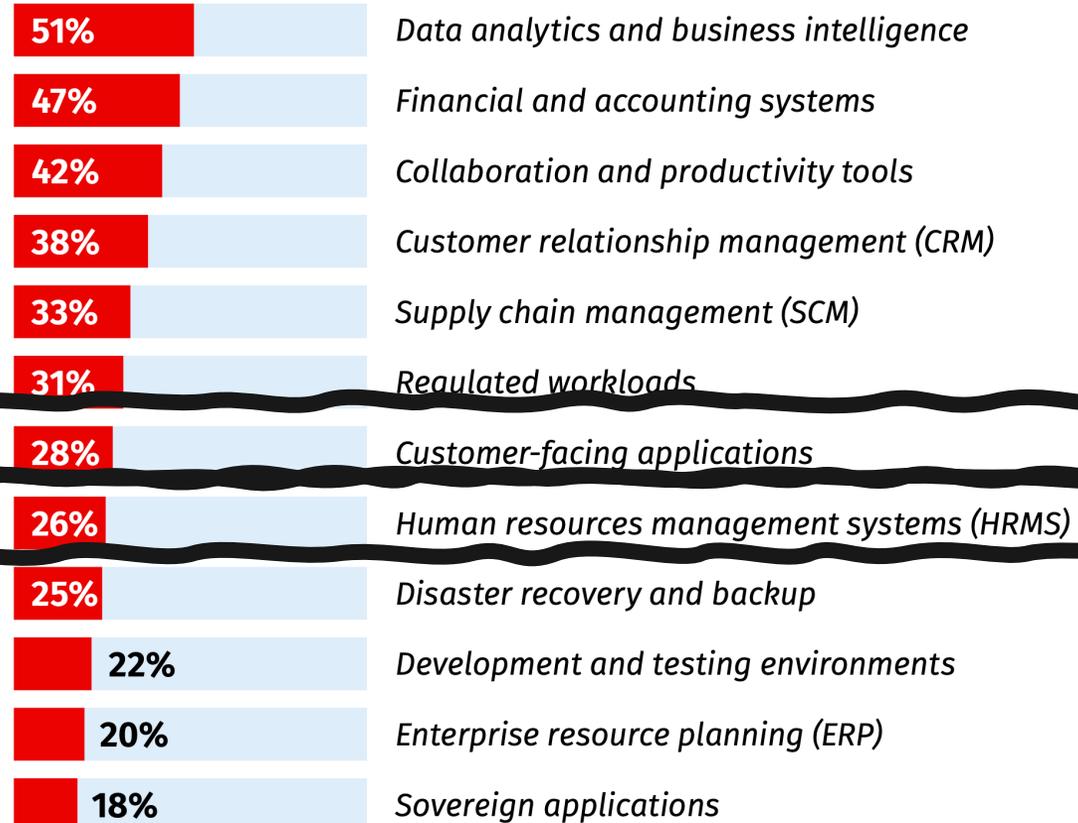
Data Sovereignty

Continuity Regulatory Compliance

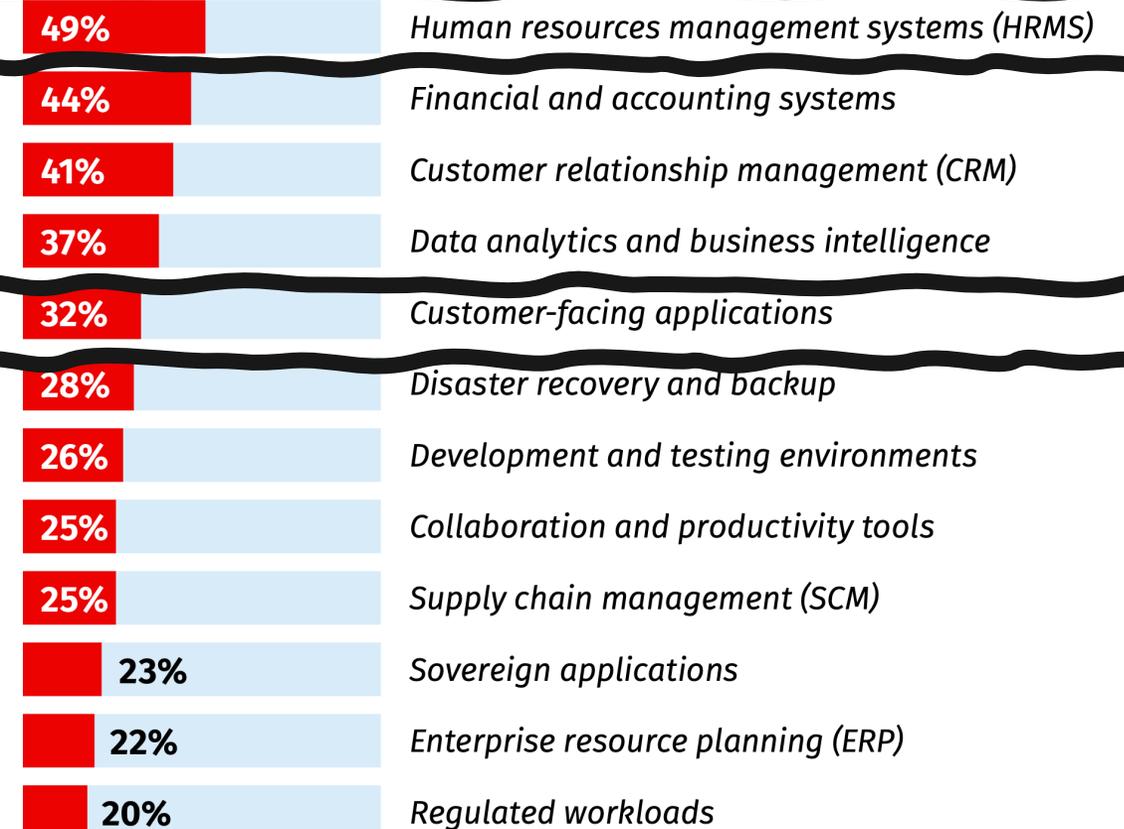
Customization and Flexibility

Integration with Legacy System

Workloads prioritized for cloud adoption

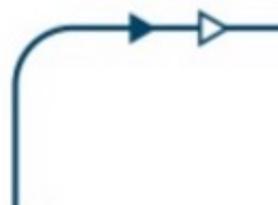
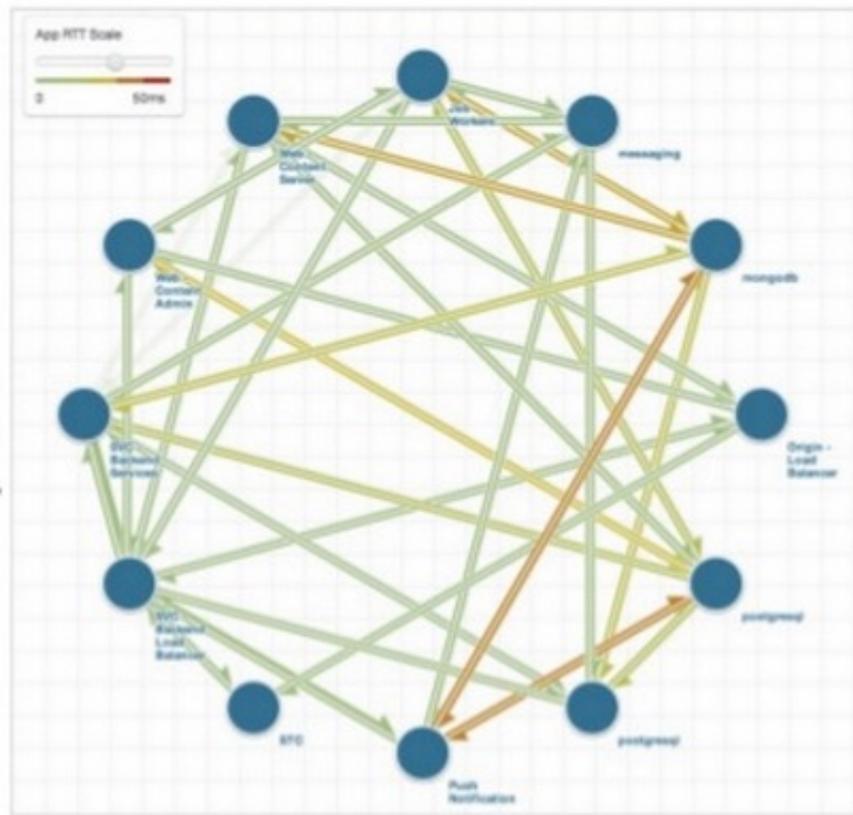


Workloads preferred to keep on-premises

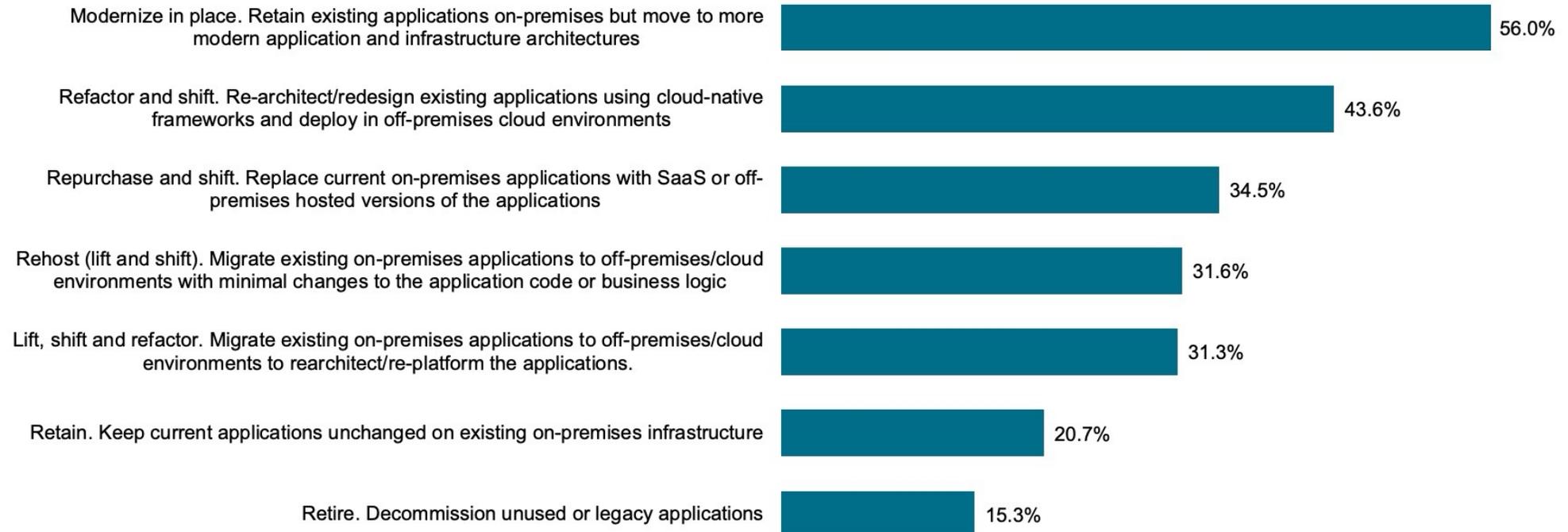


Three pieces of anecdotal data

“Death Star” Architecture Diagrams



Which of the following approaches are or will be part of your organization's ongoing approach to application modernization. Please select all that apply.



Q. Which of the following approaches are or will be part of your organization's ongoing approach to application modernization. Please select all that apply.

Base: Current or future public cloud users (n=275)

Source: 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Application Modernization 2024

DATA





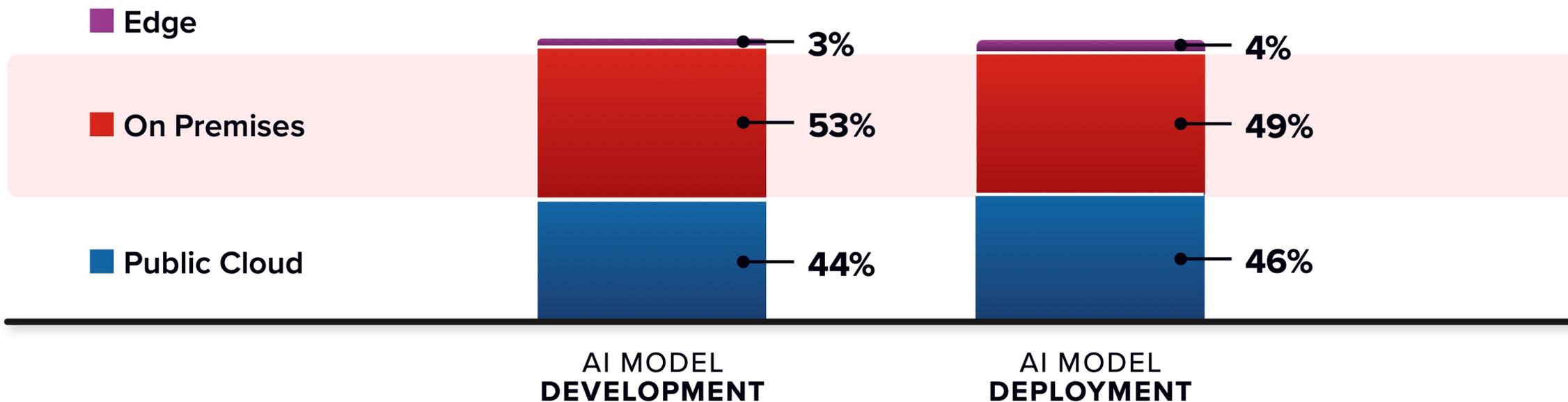
Just one more thing...

FIGURE 5

Deployment Location for the Development and Deployment of AI Models

Where does your organization primarily develop and deploy AI models?

(Percentage of respondents)

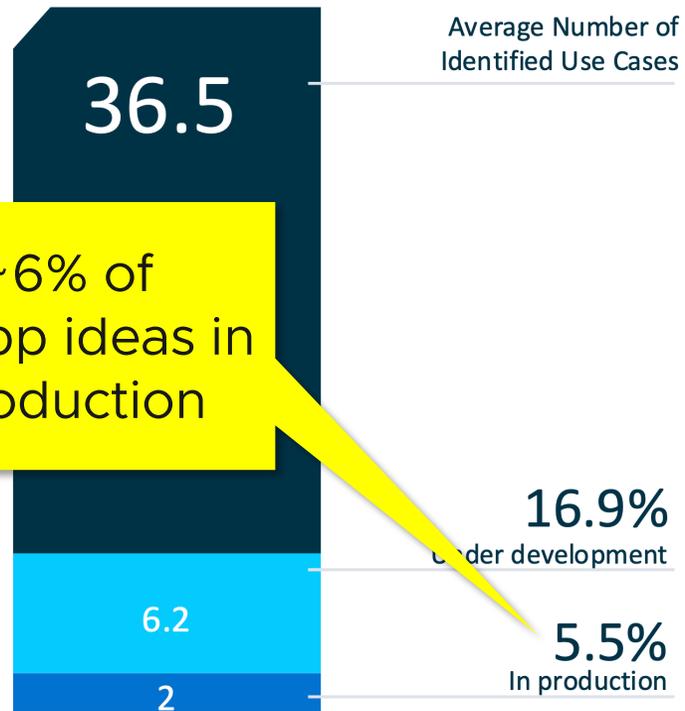


Note: Public cloud includes public cloud provider, managed services provider, and special-purpose cloud. On premises includes private cloud, traditional infrastructure, and colocation provider. n = 411; Source: IDC's *AI Infrastructure Survey*, July 2024.

For an accessible version of the data in this figure, see [Figure 5 Supplemental Data](#) in Appendix 1.

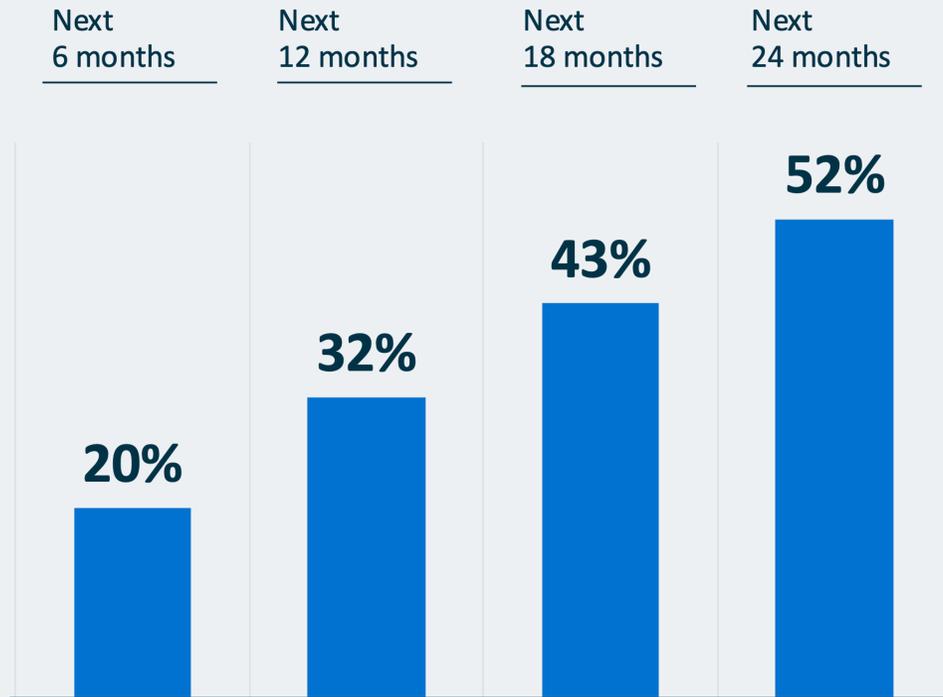
Building Wave of Generative AI Use Cases

STATUS OF AI ADOPTION OF USE CASES



~6% of AI app ideas in production

EXPECTED PERCENT OF AI USE CASES INTO PRODUCTION



52%
of identified use cases are planned to be in production over the next 24 months. Moreover, 47% of enterprises expect to increase the number of identified use cases into production over the next 6 months.

With so many enterprise generative AI use cases going into production, new tooling will be required for IT to manage them, including security and governance.

Exhibit 5 - The Biggest Challenges Relate to People and Processes, Such as Prioritizing Opportunities and Establishing Rol

Focus areas

BCG's 10-20-70 model



Algorithms
10%



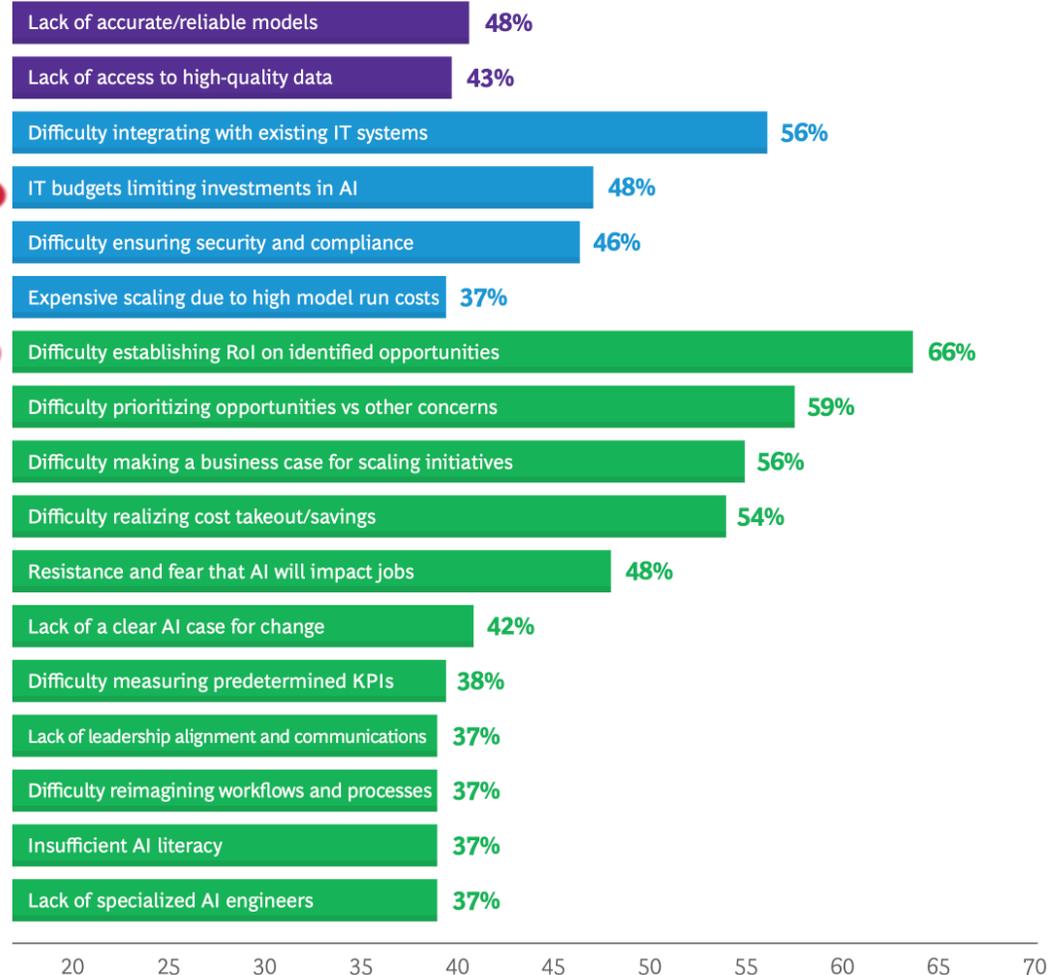
Technology
20%



People and processes
70%

Key challenges

Respondents citing the challenge (%)

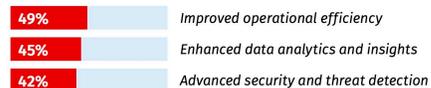


Source: BCG Build for the Future 2024 Global Study (merged with DAI); n = 1,000.



AI use cases in the cloud

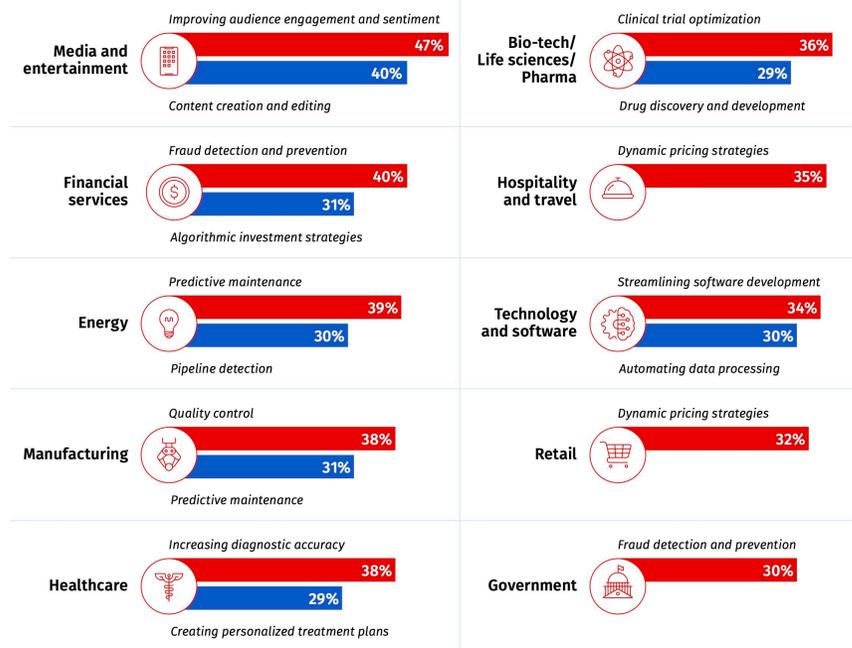
What specific use cases are you leveraging by integrating AI with your cloud strategy?



Other top AI use cases by sector

What specific use cases are you leveraging by integrating AI with your cloud strategy?

Top answers indicated below



ROI performance against expectations

(for most advanced initiatives)

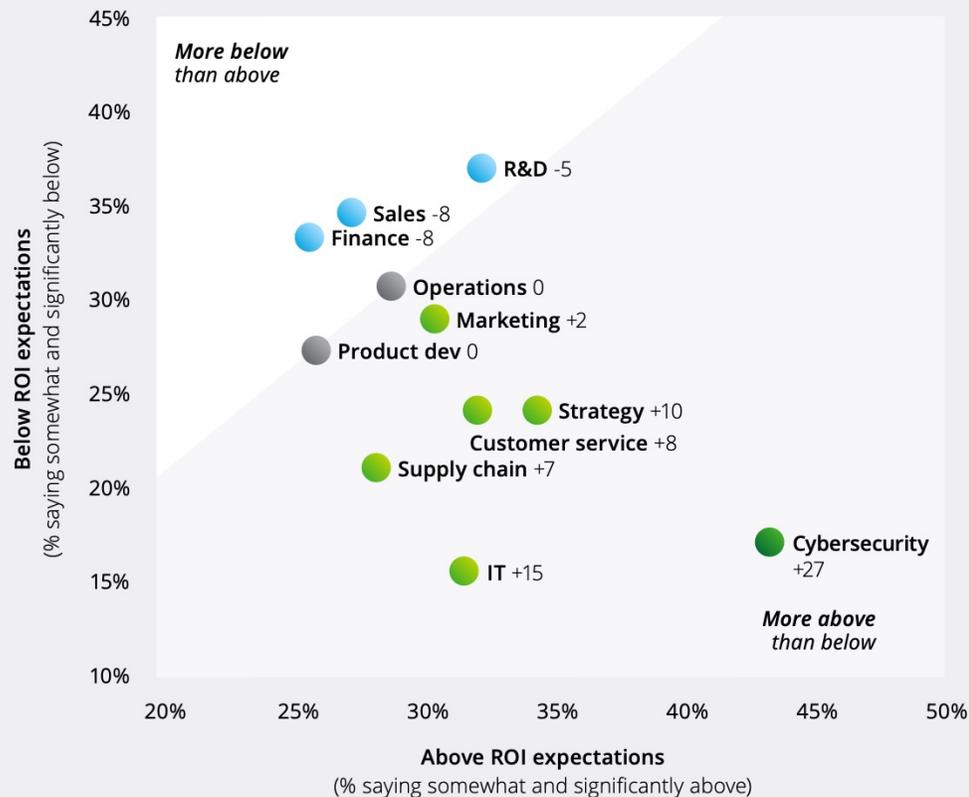


Figure 7

Q: How is the ROI from this Generative AI initiative meeting your organization's expectations?

State of Generative AI in the Enterprise Survey, (July/Sept. 2024) N (Total) = 2,773

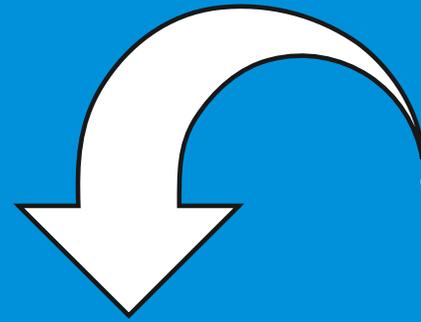
- Below expectations
- Meeting expectations
- Above expectations
- Significantly above expectations

The numbers with each function indicate the difference between the % above expectations and the % below expectations.

**Is it paying
off?
(ROI)**



Thanks!



Slides & stuff

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