

Data, Analytics & ML in the Cloud



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What will we talk about today?

State of the market
in numbers

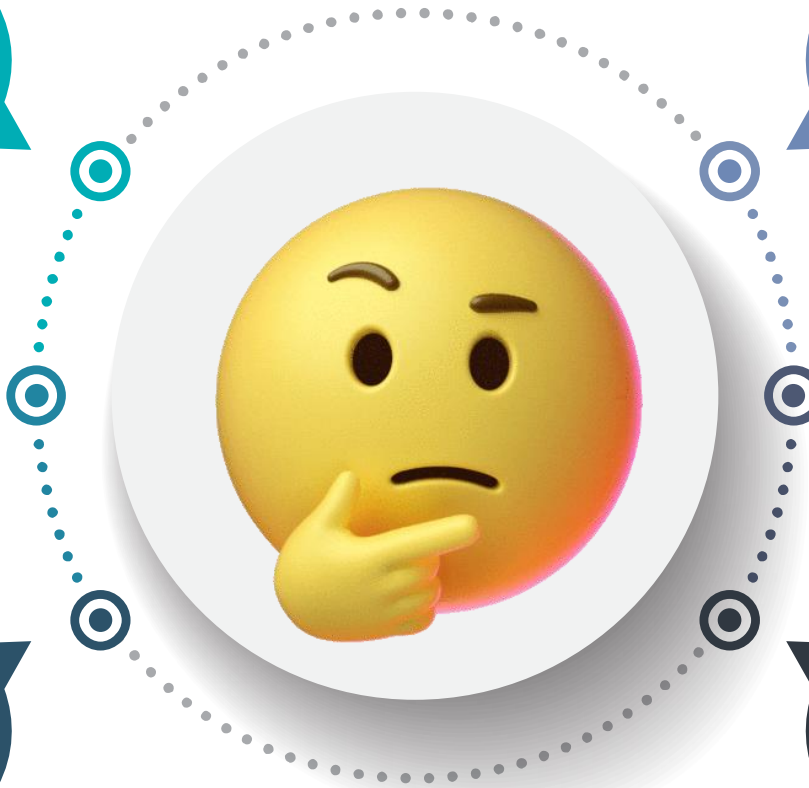
Who is unlocking
value?

Keys to success &
roadblocks

What are high
performers
characteristics?

What does it mean
to move D&A to the
cloud?

What should we do
to prepare?

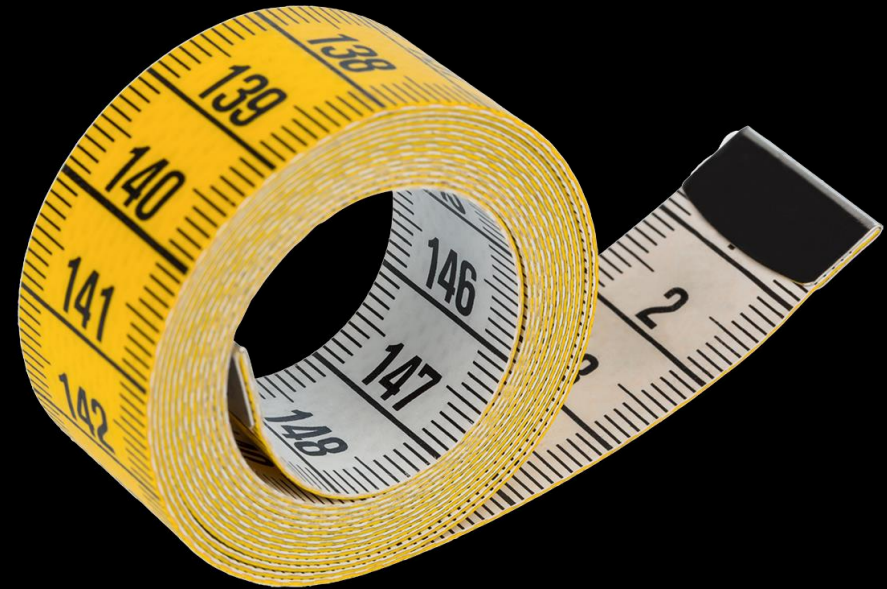


What will we NOT talk about today?

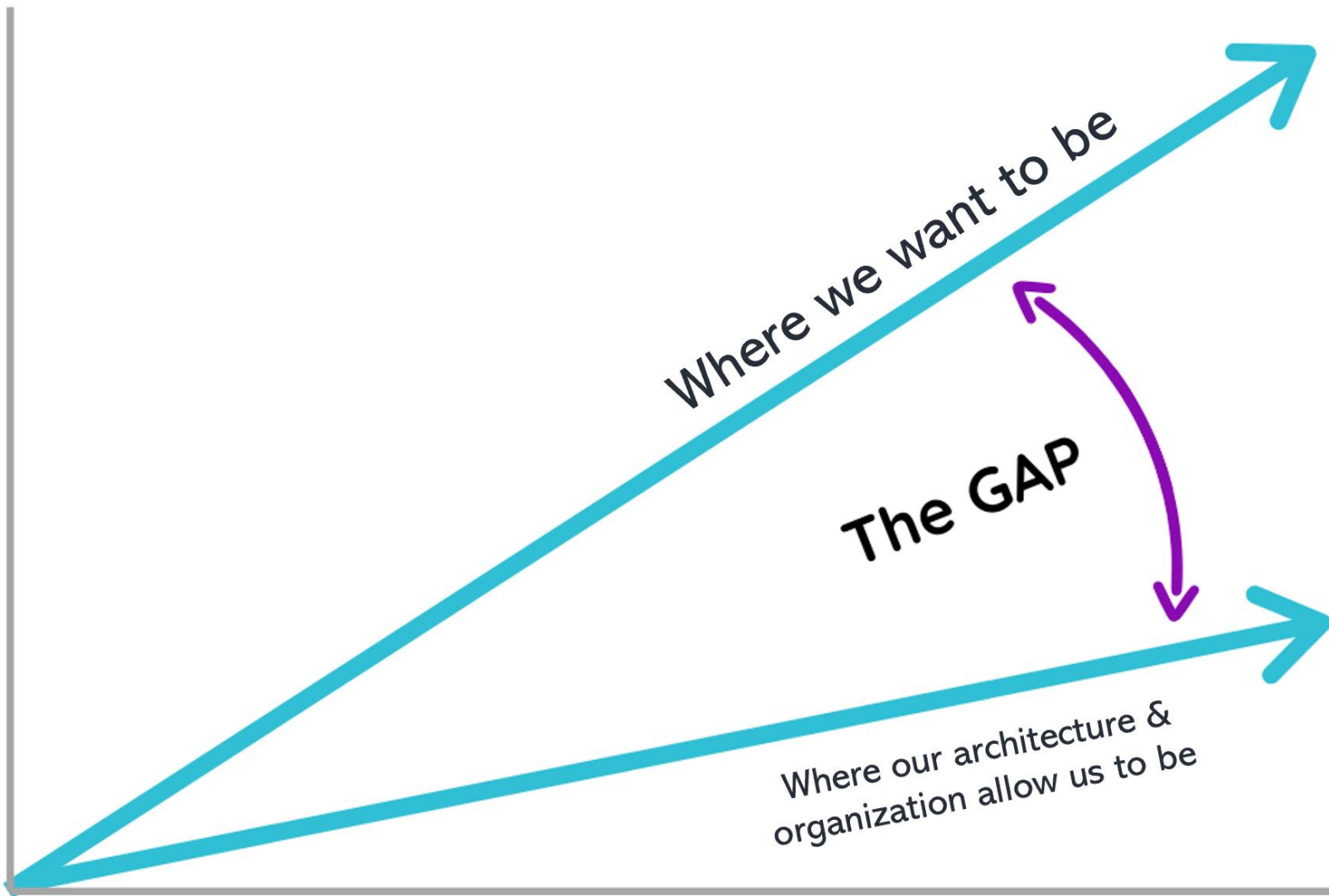
< Maybe just a little 😊 >



Where are we now?



The data value gap

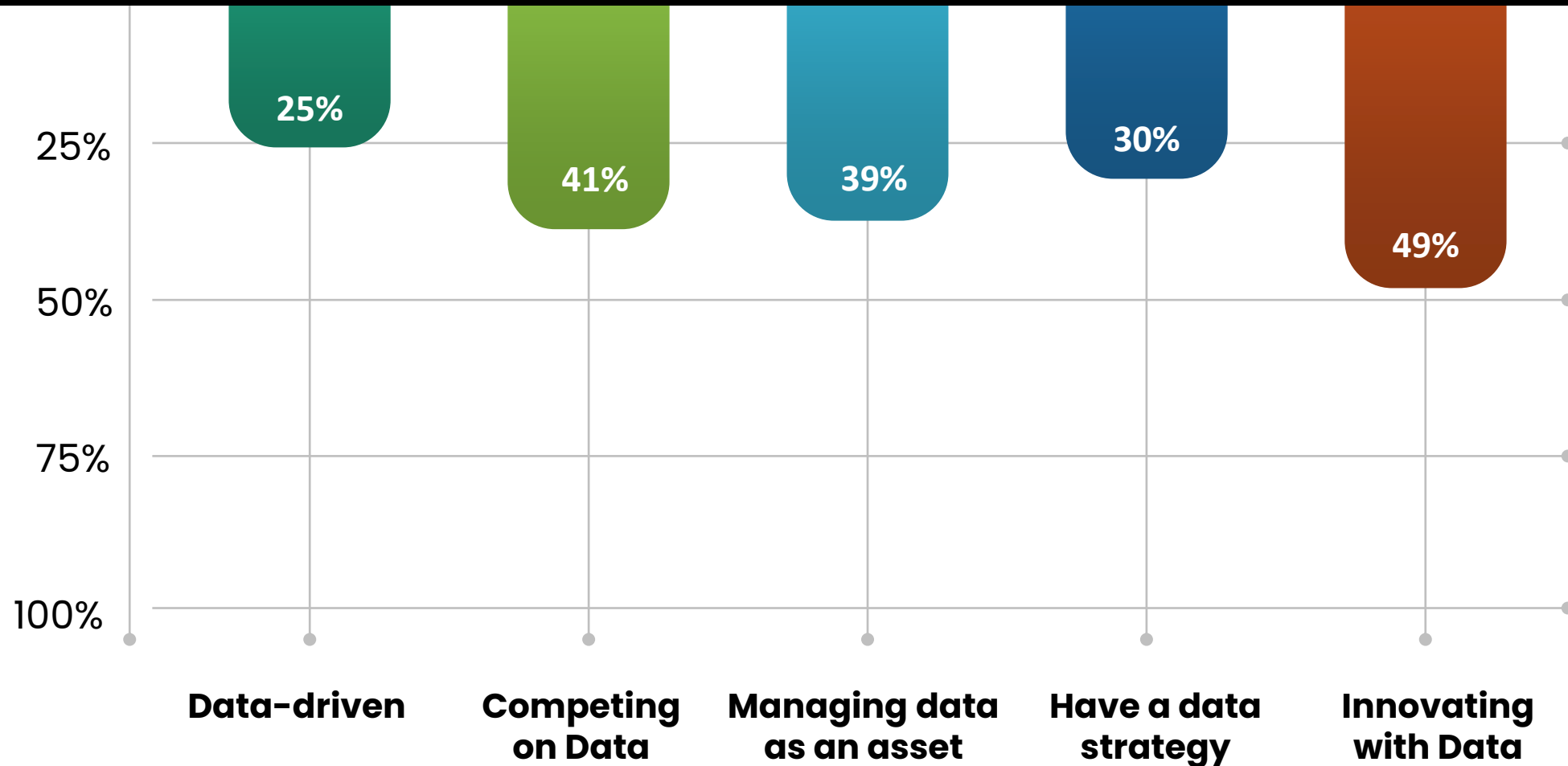


Data is the new-whatever
ML AI transforming processes
Everything is data-driven

Skills shortage
Taking too long to get the data
ML is failing in 85% of cases
Low quality data
No governance
Data is all over the place
Culture barrier
low literacy

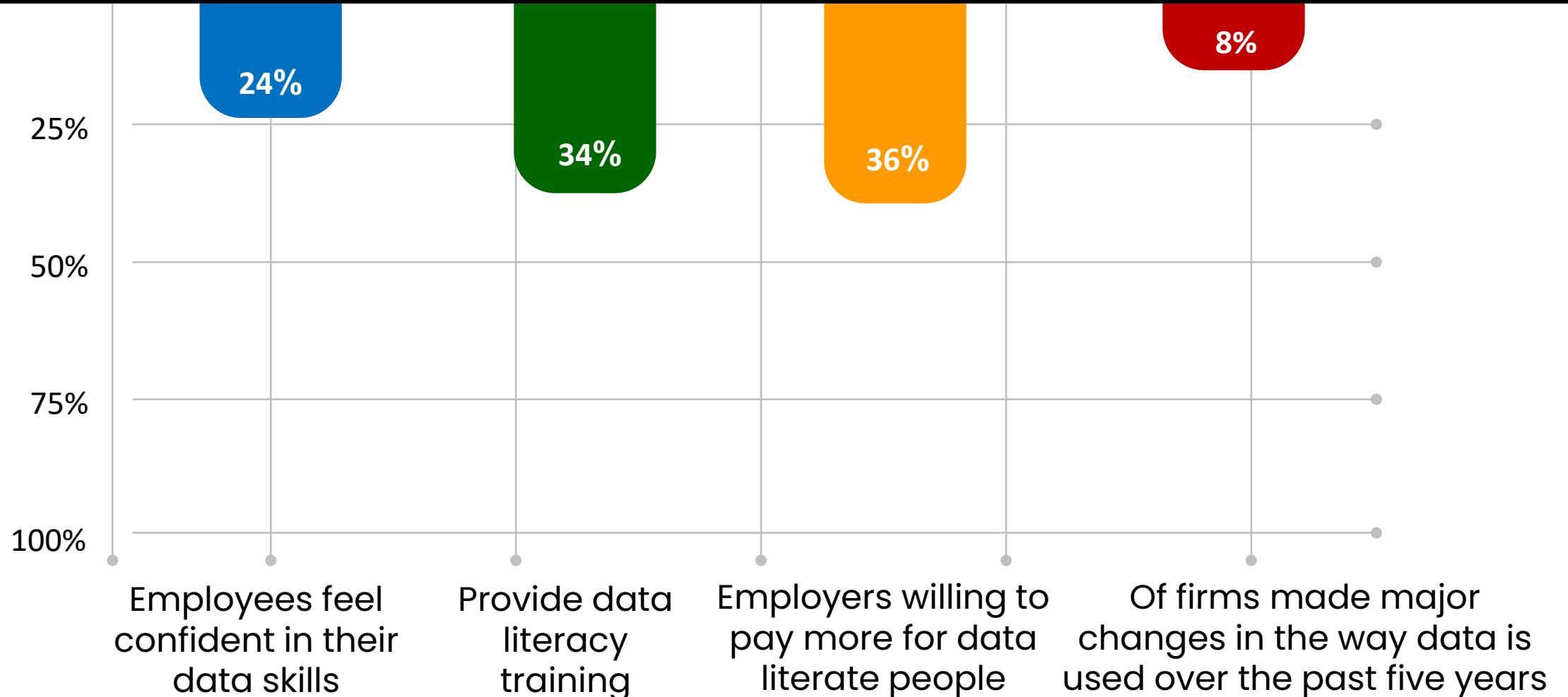
Data driven journeys are stuck!

Source: NewVantage Partners



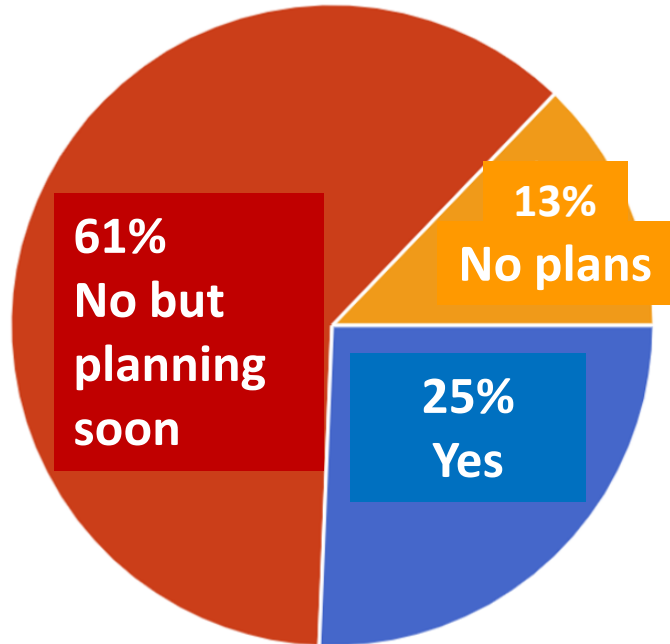
The state of data literacy

Source: Qlik



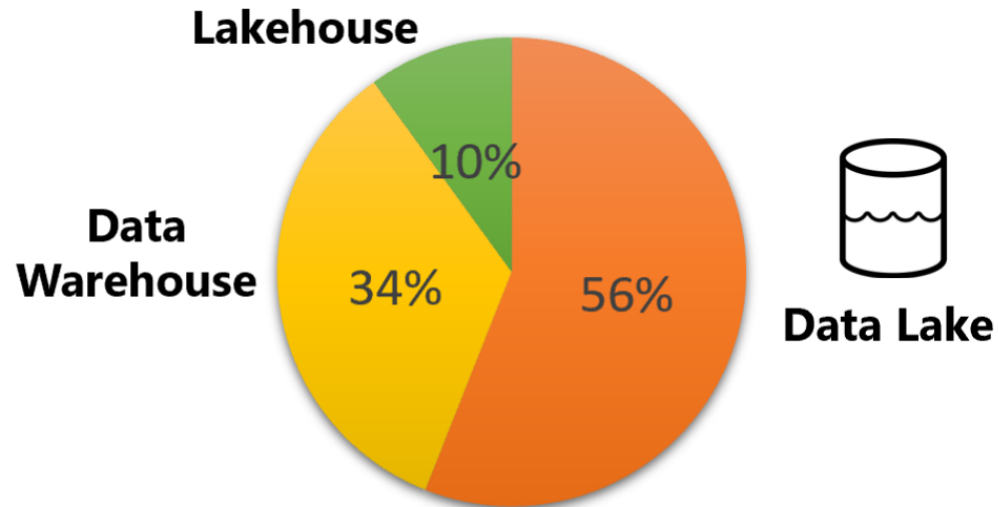


Data & Analytics cloud adoption in Israel:



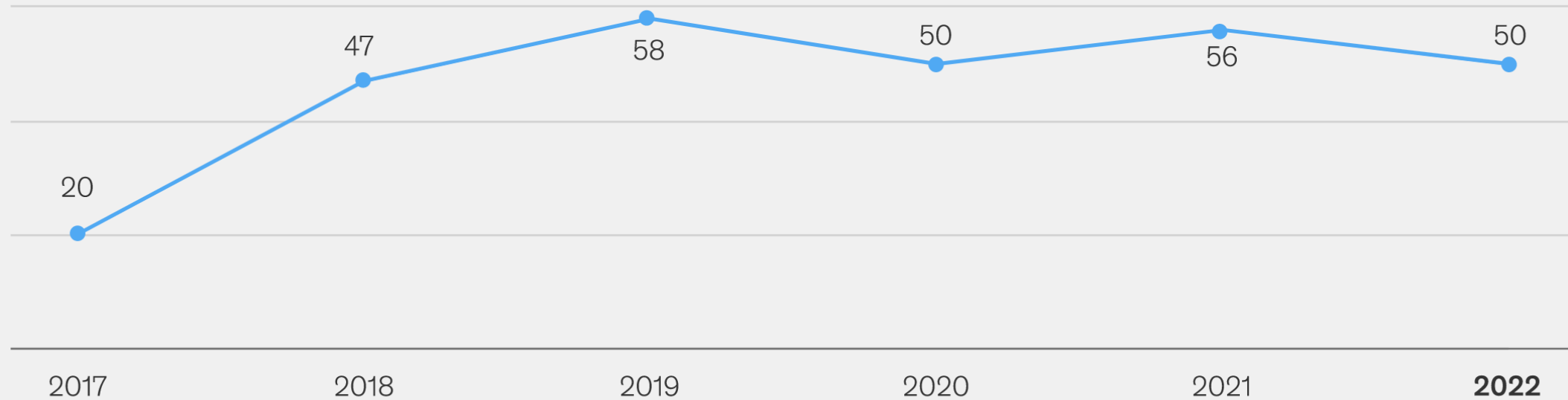
85% of Israeli organizations will use D&A clouds soon!

For which use case?



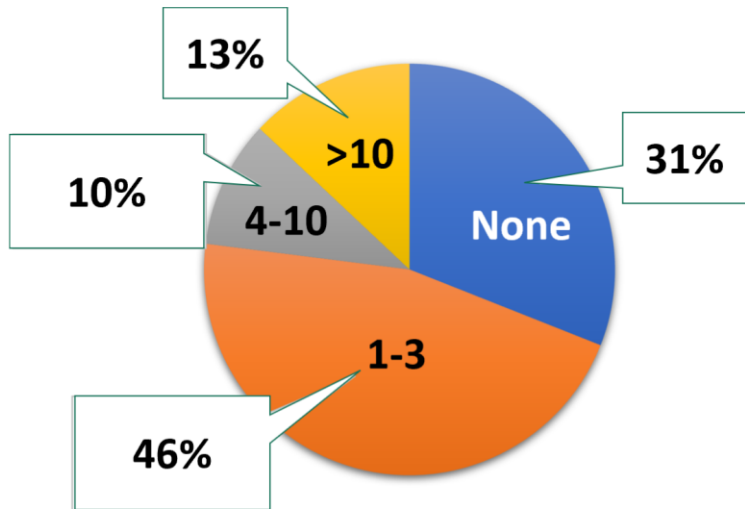
92% of organizations are using* AI/ML

Share of respondents who say their organizations have adopted AI in at least one business unit or function, %

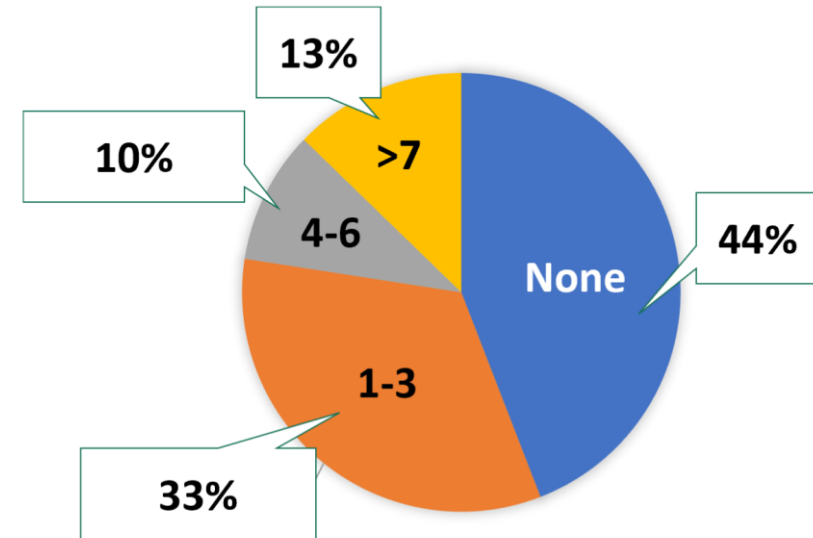


McKinsey & Company

Number of ML models developed:



Number of ML models in production?



Who is unlocking value from Data & AI?



“Organizations are **starting to see an impact** on their bottom line from the adoption of AI”

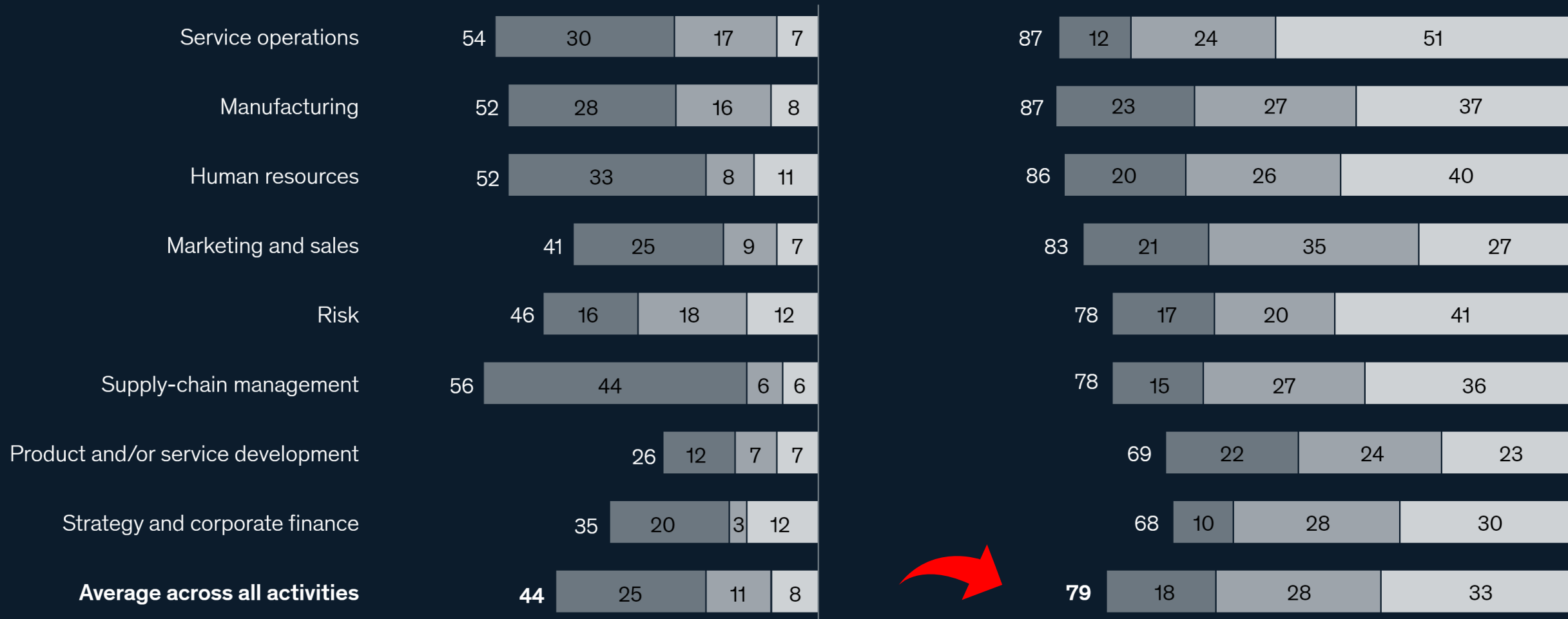
– McKinsey State of AI Report

Cost decrease from AI adoption by function, % of respondents¹

■ Decrease by <10% ■ Decrease by 10–19% ■ Decrease ≥20%

Fiscal year 2019

Fiscal year 2020



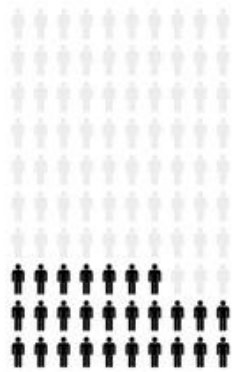
Source: McKinsey State of AI 2021



MIND THE GAP



It is widening



27%

shutterstock.com · 1779279338

Attribute >5% of EBIT to AI
EBIT: earnings before interest and taxes



11%

shutterstock.com · 1779103223

Of organizations report
significant financial impact

AI high performers: attribute >20% of EBIT to their use of AI (McKinsey)



8% of companies (McKinsey), 12% (Accenture), <15% (Deloitte)

What are high performers characteristics?

#1 They 'industrialize' AI:

Automation of data related processes

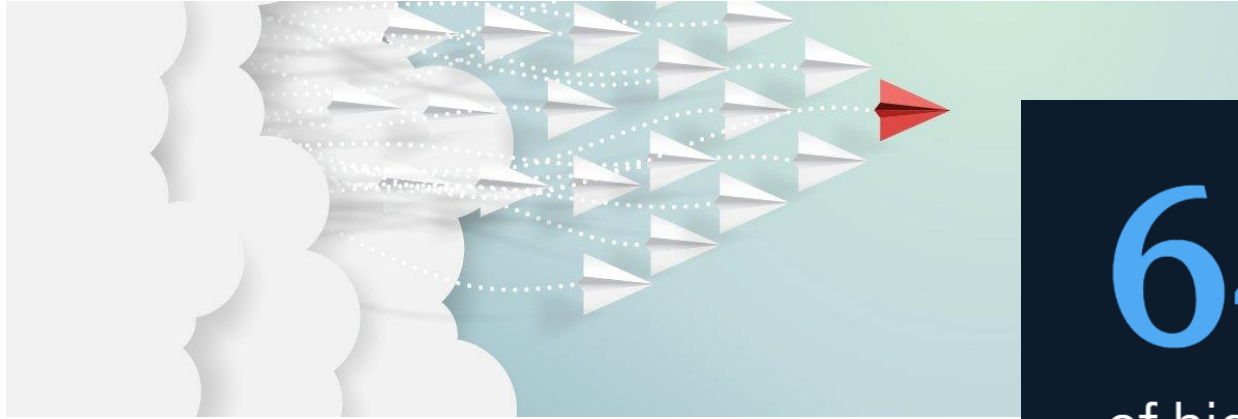
Use of low code platforms to speed up new uses

Mitigating risk of AI and data governance

Testing of validity of models over time

#2 They use the cloud as an enabler

Modular AI architecture for new use cases
Using the cloud as an enabler



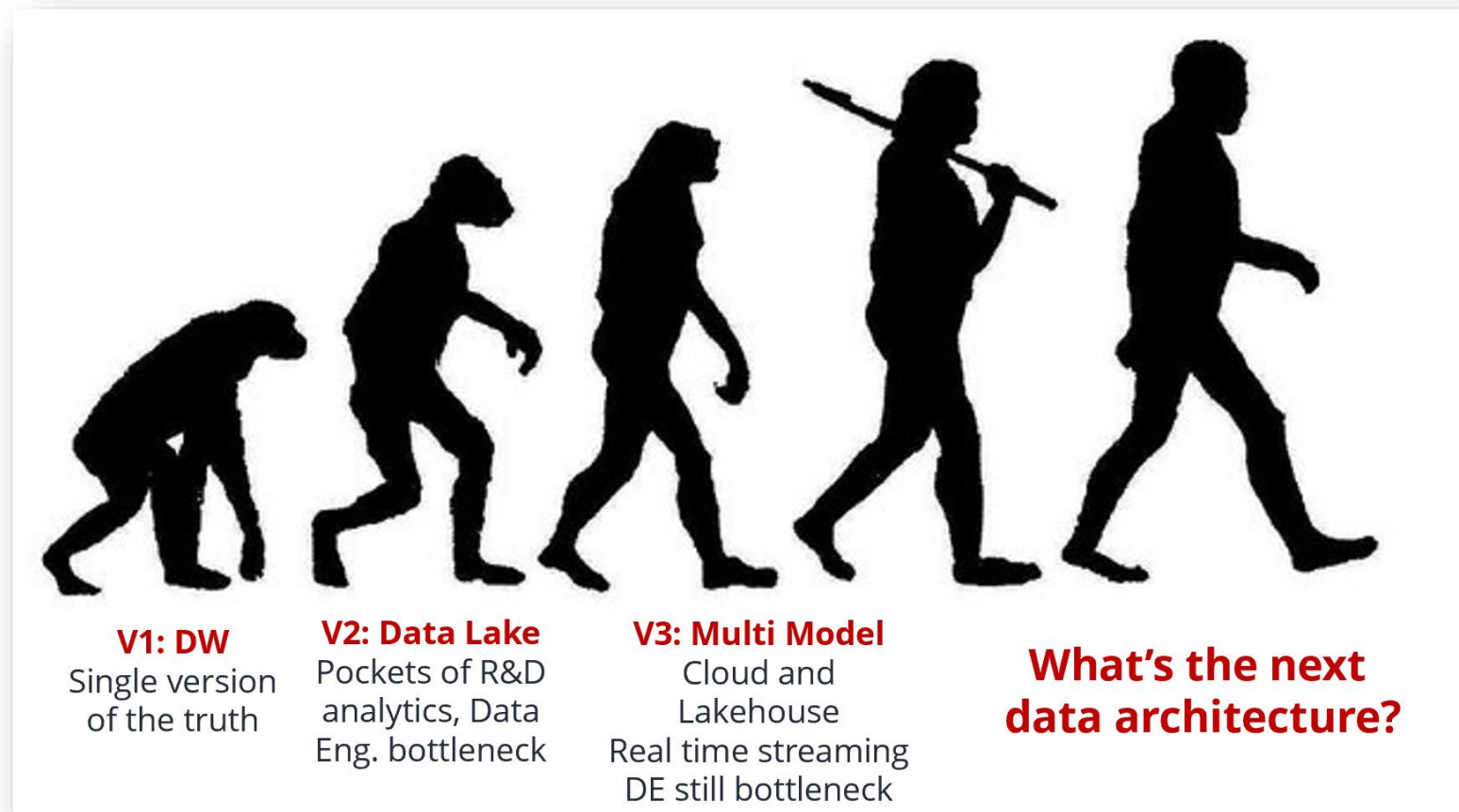
McKinsey
& Company

64%

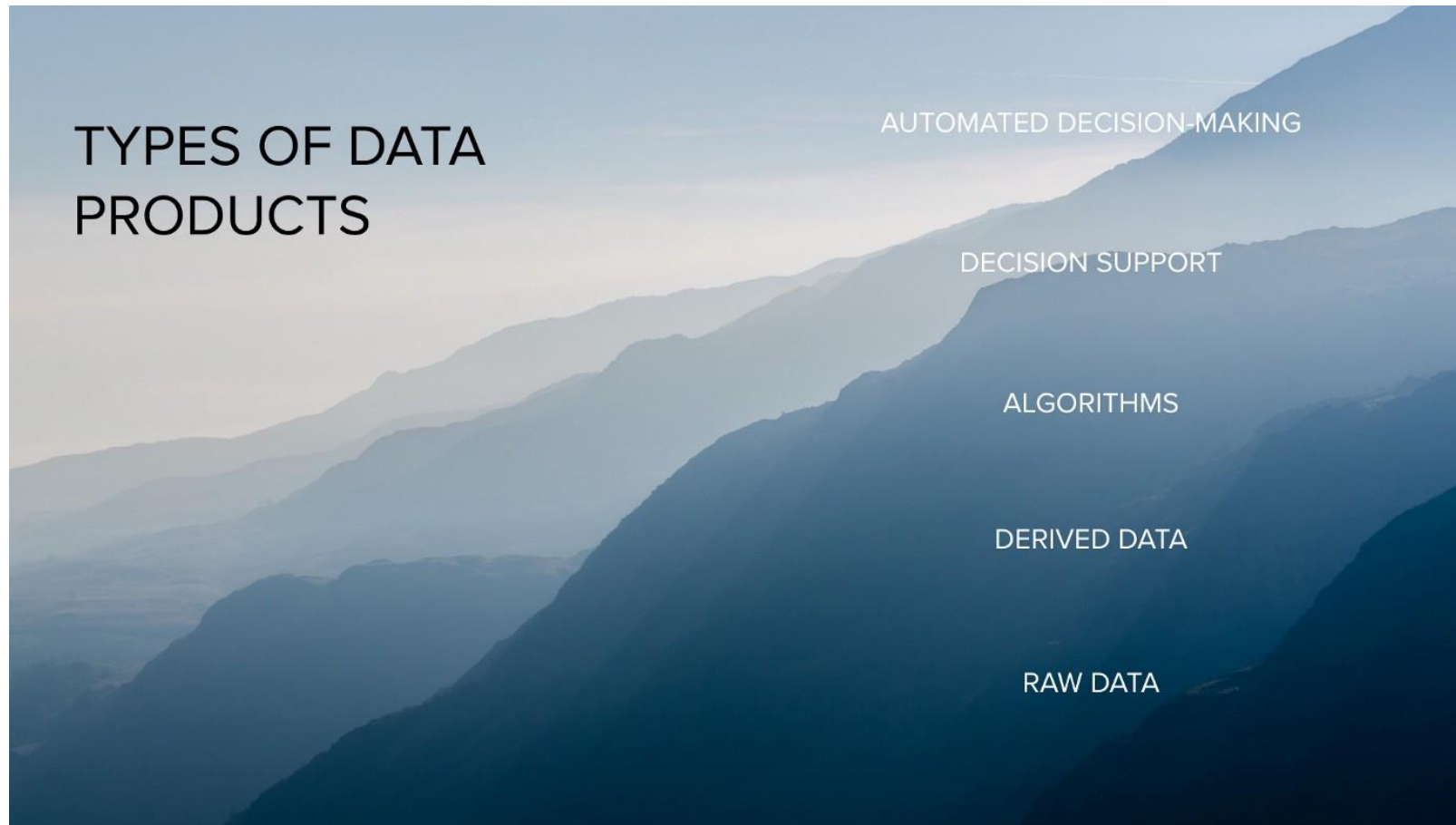
of high performers' AI workloads run on public or hybrid cloud, compared with 44 percent at other companies.

Run more workloads on clouds
And accessing a wider range of AI capabilities and techniques on the cloud

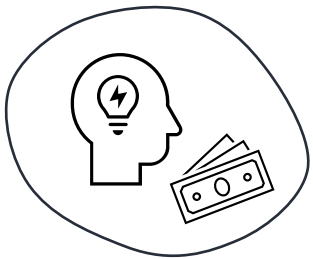
#3 They keep up with technology change



#3 They adopted a 'product' mindset



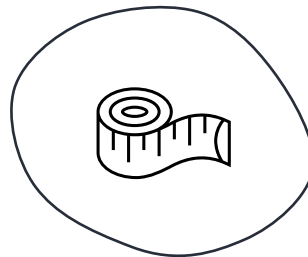
What does the concept of **data products** mean to the data world?



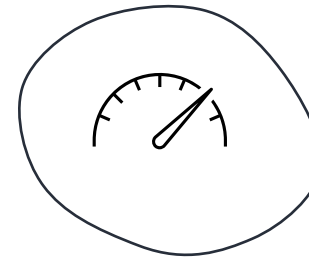
- Forces us to focus on the problem
- Promotes data monetization thinking



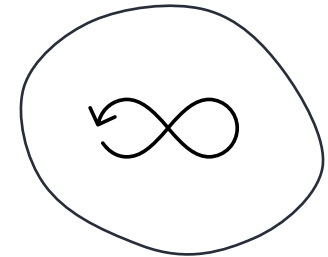
Puts emphasis on UX and Design



Measures outcomes not outputs
Creates greater impact

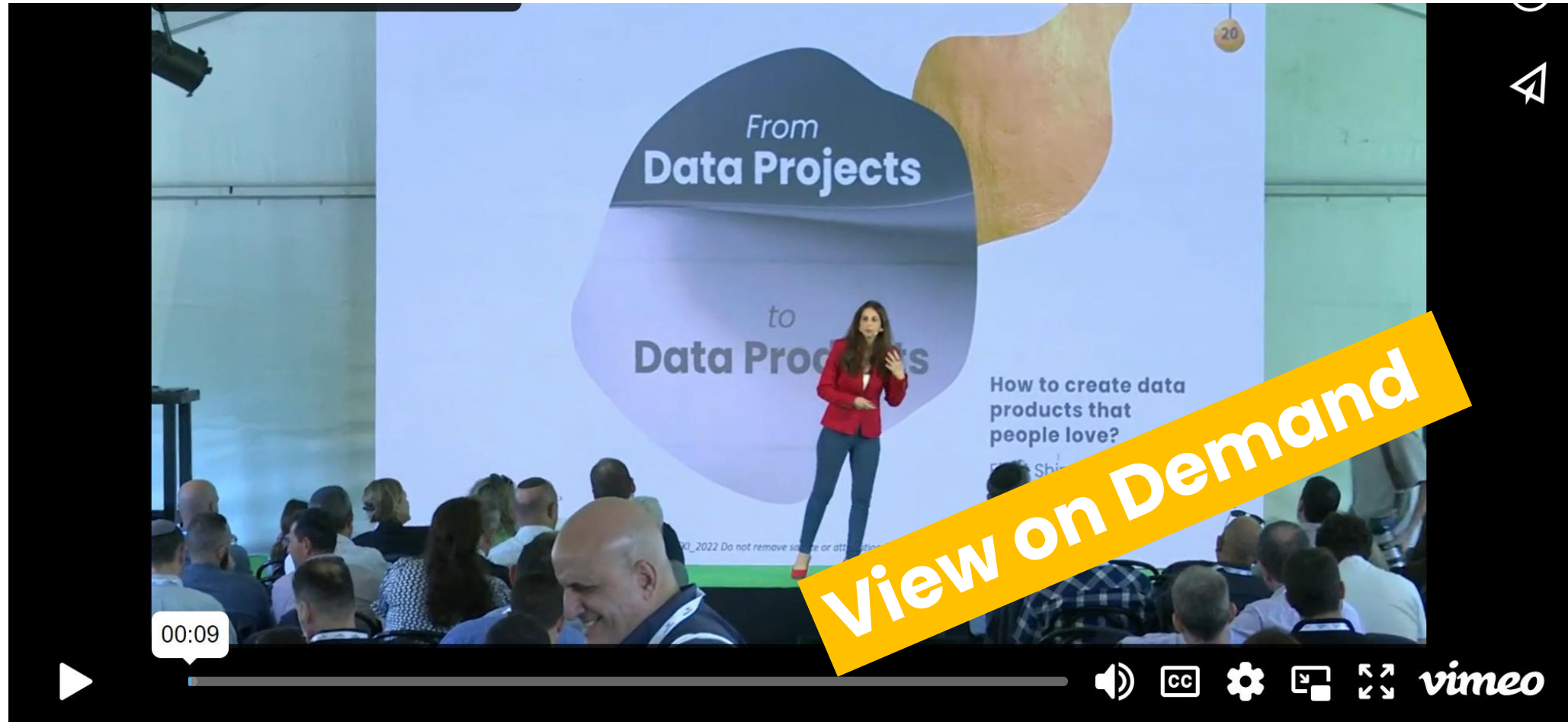


Team is accountable
For usage & impact
OKRs



Operating model that suits the iterative nature of DS

From Data Projects to Data Products



<https://vimeo.com/776302795/231593a40c>

#4

They created an accessible and trusted data platform

CIO
↑

↓
CDO

#5

Different operating model
Methodologies
Focus (value)

AI High performers are more likely to:

Have well-defined processes for data governance

Have a data dictionary that is accessible across the enterprise

Track the performance of AI models to ensure that process outcomes and/or models improve over time



Manage and
reduce risk

McKinsey
& Company

AI High performers are more likely to:

Use design thinking when developing AI tools

Users are taught the basics of how the models work

There are designated channels of communications and touchpoints between AI users and the organization's data science team

A dedicated training center develops nontechnical personnel's AI skills through hands-on learning

Focus on value realization

AI High performers are more likely to:

Take a full life-cycle approach to developing and deploying AI models

Use a standardized end-to-end platform for AI-related data science, data engineering, and application development

McKinsey
& Company

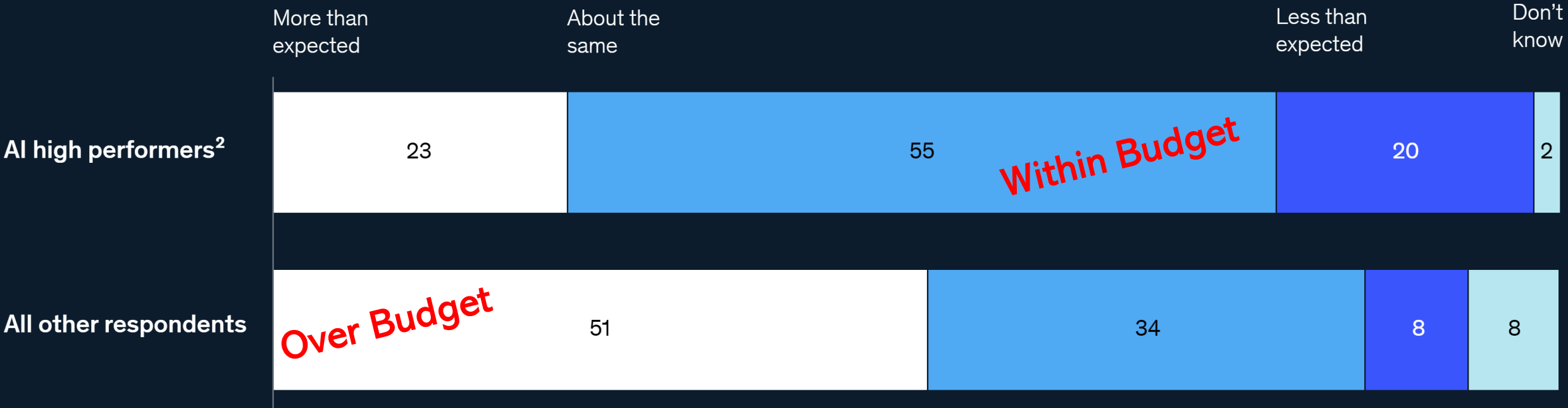


Looking at the
entire process

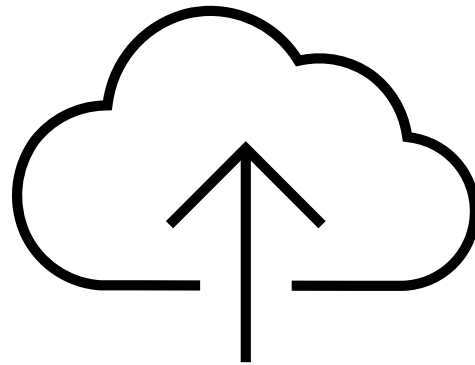
Managing cost and budget better

Compared with their peers, the high performers' AI spending is more efficient and predictable.

Typical costs for AI model production, compared with expected,¹ % of respondents



What does it mean to move Analytics & ML to the cloud?



1. Democratization of AI

Economies of scale

Marketplaces and APIs

Anything is possible (but stay focused)

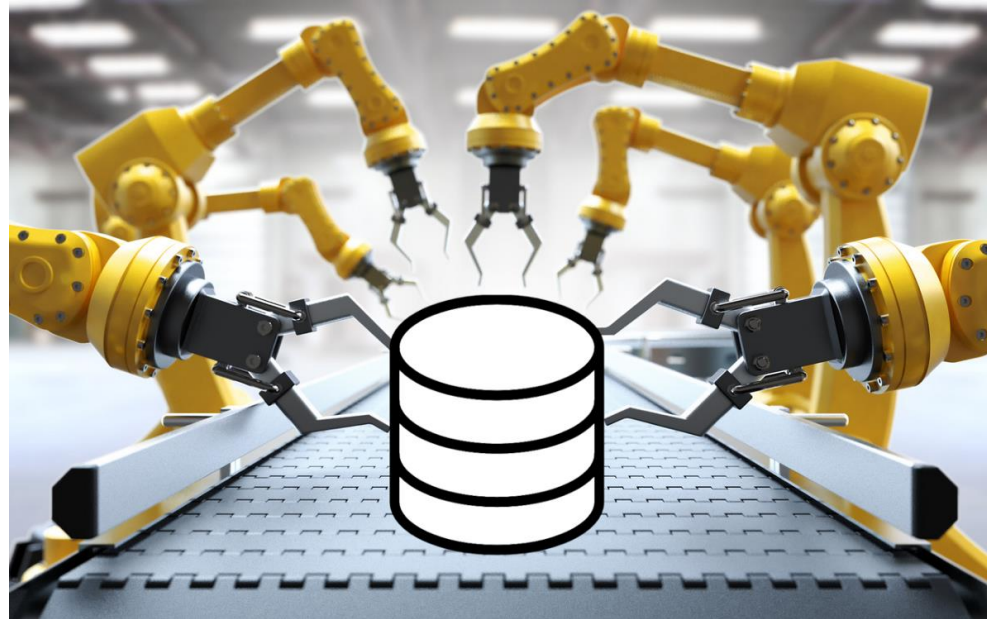
Ready made building blocks

2. The ultimate POCs playground

Fail-fast
Innovation enabler
Low price of “error”
breaking loose of the “ROI” approach

3. Automation

AutoML
Process
Teams
Platforms
MLOps



3. Cloud Costs



Server is running unnecessarily in traditional DC – not a big deal



Server is running unnecessarily in Cloud – very big deal \$\$

Is FinOps the answer?

Cloud (subscription) procurement



In general cloud providers are not committed to price (mostly price will drop down → contract with no price commitment)



Cloud providers in IaaS PaaS will not shut down service even when budget is over. How can we agree for a deal with no boundaries?



Getting bigger discount by spend commitment is reducing cloud advantage



Security and regulation is taking bigger part in contracts

What should we do today to prepare?

FinOps, budget mng, cost optimization

Talent and skills shortage:

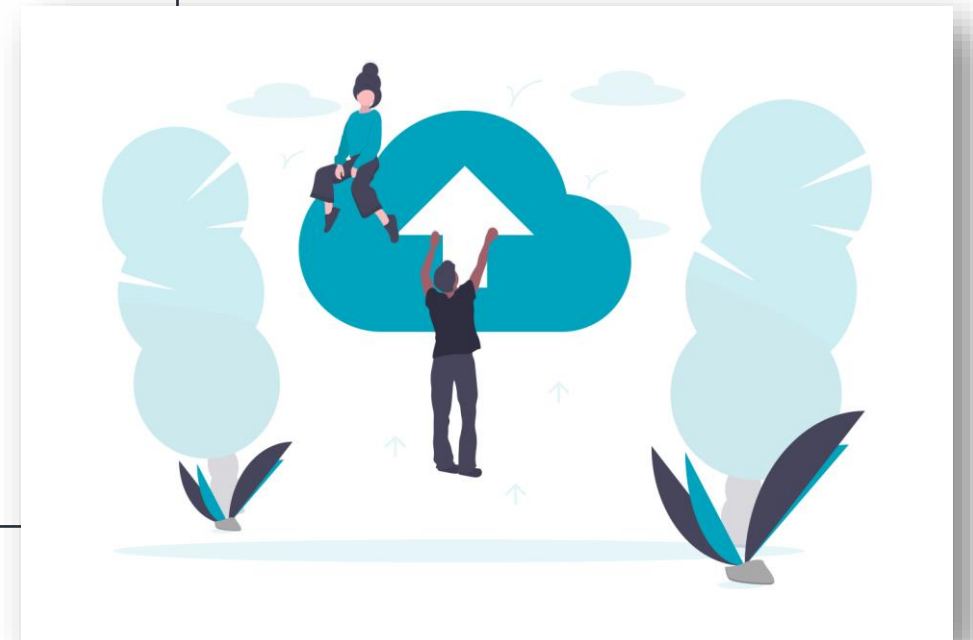
Upskilling/ Reskilling, automation

Data catalog/ownership?

Sensitive data policy definition:

Encryption? Anonymization?

Don't try to do it alone!





Thank you!

