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# The AI Efficiency Divide

Measuring AI's Real Value Beyond the Hype

Global CMO Survey Report 2026



## Foreword

Every few years, a technology comes along that quietly rewrites the rules of growth. For our generation of marketers, that technology is AI. You can see it in budgets, boardroom conversations, and the sheer pace of experimentation across our teams.

And yet, here is the uncomfortable truth that keeps coming up in my conversations with CMOs: we are investing more in AI than ever before, but most of us still struggle to answer the one question our boards are asking: is it really working?

This report is our attempt to address that. I won't pretend this is easy. Measurement is always hard, especially when the technology in question spans channels, teams, and even business models. But this report offers a practical starting point: a way to move from AI enthusiasm to AI evidence, from optimism to accountability.

If this report helps you do that even a little better, it will have served its purpose.

### Suryadeep Verma

Chief Marketing Officer



## Introduction

Your organization is likely among the 90% that increased AI investment over the past 12 months. Hundreds of millions of dollars are flowing into AI-powered marketing, customer experience systems, and operations. The AI market in telecommunications was valued at roughly \$2.7 billion in 2024 and is expected to grow rapidly, with a ~32.6% CAGR through 2034. Yet one critical question remains unanswered in boardrooms:

“

**For every dollar we invest in AI, how much incremental revenue does it create?**

The problem isn't AI capability. It's AI accountability. Traditional ROI frameworks were never designed for algorithmic, always-on, multi-touch systems. As a result, CMOs, CFOs, and boards lack a common language to assess what AI actually contributes to growth.

We surveyed 200 enterprises across telecommunications, retail, and e-commerce to understand how they use AI and, more importantly, how they (or do not) measure its impact. The findings reveal a critical efficiency blind

spot that threatens to undermine the massive capital flowing into AI-powered marketing: roughly **20% of organizations** can quantify the attributable revenue impact of their AI marketing investments, while **67%** struggle with basic AI cost attribution, as they cannot reliably determine AI costs after accounting for infrastructure, data, and talent.

The next 18 months will be critical; expect boards and investors to demand hard evidence. Organizations that establish rigorous AI efficiency metrics now will secure a competitive advantage. Those who delay will face a difficult position: building measurement infrastructure while defending why existing investments can't be proven to work.

As AI capabilities commoditize and become table stakes, competitive advantage comes from measuring AI, not from accumulating features. Having AI is like having electricity; it's necessary, but not differentiating. What matters is how efficiently you turn that electricity into value.

**What's missing is not more AI. It's a shared, board-ready way to measure whether AI actually works.**



# Key Findings

**90%** of organizations increased AI marketing investment in the past two years. Yet only 12% can quantify the revenue it generates.

**86%** of marketing leaders have been asked by their board or C-suite to justify AI spending in the past 12 months.

**67%** cannot determine what AI actually costs once infrastructure, data, and talent are included. Most track the license fee and miss the iceberg below.

**79%** rely on portfolio estimates or activity proxies. Only 21% can link AI spend to revenue at the campaign level.

**12%** of companies rigorously measure AI's incremental revenue impact.

## The Reality Check

### When Investment Outpaces Accountability

The debate over whether to invest in AI is over. AI investment is now a baseline expectation, not a strategic differentiator. Our survey data confirms what most executives already sense: 90% of organizations increased their AI investment over the past two years. More than a third report growth of more than 50% (see Figure 1).

This isn't limited to marketing budgets. These are enterprise-wide bets, and one report estimates that the AI market in telecom across all use cases will grow to about \$6.69 billion in 2026.

The pattern is consistent across verticals. A Tier-1 APAC telco recently restructured its entire customer lifecycle management to be AI-driven. A top-5 global retailer committed

more than \$80 billion to AI transformation in 2025 alone, redesigning operations and the customer experience from the ground up. These are not experiments. They are strategic pivots.

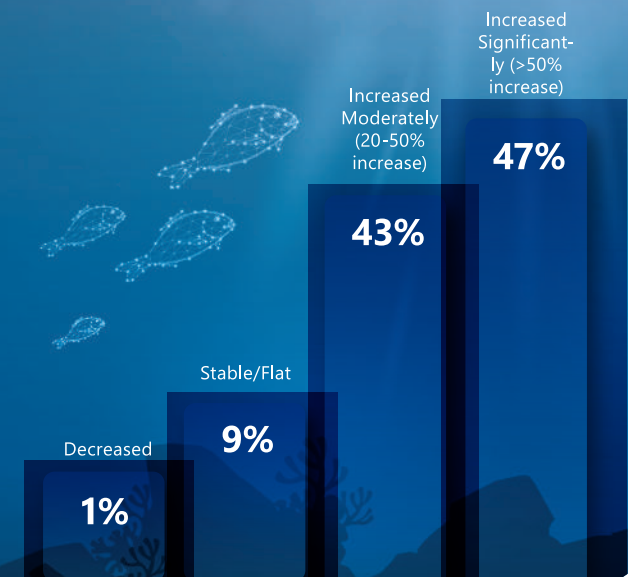
**AI adoption is no longer a signal of ambition. It's a baseline. The question has shifted from "should we invest?" to "can we prove it's working?"**



Figure 1

## The AI Investment Surge

How has your total AI investment trended over the past 2 years?



## The Accountability Gap No One Planned For

When we asked organizations whether they could quantify the incremental revenue directly attributable to AI, revenue that would not have occurred without it, the responses revealed a gap that should concern every board.

Figure 2 The AI Efficiency Measurement Gap: Can You Prove AI's Value?

12%

can rigorously measure AI's incremental revenue impact using controlled methods. Fewer than one in eight.

35%

have a rough estimate of AI's contribution but cannot isolate it from seasonality, market shifts, or parallel campaigns.

32%

track activity metrics, campaigns launched, engagement rates, but have no visibility into whether AI actually pays for itself.

21%

measure some initiatives but lack consistent infrastructure across their AI portfolio.

Add the bottom three tiers together, and the picture is stark: 88% of organizations either cannot isolate AI's contribution to revenue or do not measure it at all.

### Boards Are Asking Faster Than Teams Can Answer

86% of marketing leaders have been asked by their board, investors, CEO, or CFO to present evidence of AI's business impact over the past 12 months (see Figure 3). The era of "trust us, AI is the future" is over. Yet only 16% feel very confident they can defend their current AI budget with hard evidence. The remaining 84% are caught between mounting pressure and a lack of proof.

Figure 3 The Board Pressure is mounting

86%

Leadership (board, investors, CEO, CFO) asked to present evidence of AI's business impact on a monthly/ quarterly basis in the last 12 months.

16%

Organizations are very confident that they can defend their current AI budget with quantified business value evidence.

We've seen this before. Companies poured millions into early digital marketing, armed with "impressions" and vague brand awareness metrics. It took a decade to bring measurement discipline to that spending. AI is following the same script, but at ten times the speed and scale.

### The Measurement Paradox

## Why Smart Organizations Still Can't Measure

If the accountability gap were simply about negligence, it would be easy to fix. Hire better analysts. Buy better tools. But that's not what's happening. The organizations struggling to measure AI include some of the most sophisticated data teams in their industries.

**This is not incompetence.  
It's structural.**

AI measurement fails because it sits at the intersection of four systemic breakdowns that traditional tools were never designed to address. Each is difficult on its own. Together, they create a blind spot that no single team can resolve.

Figure 4

## What's Blocking AI Measurement?

### 1 Cost Fragmentation 62% struggle here

AI costs are scattered across cloud bills, talent budgets, data engineering teams, and vendor contracts. No single department owns the full picture. For every \$1 spent on model development, organizations need \$3 for surrounding infrastructure and change management. Most companies count the license and miss the rest.

### 2 Revenue Attribution Complexity 58% struggle here

When AI augments human decisions, accelerates processes, and lifts outcomes across dozens of touchpoints simultaneously, isolating its contribution from market shifts, team performance, and parallel campaigns is genuinely difficult.

### 3 The CX-to-Revenue Disconnect 55% struggle here

AI may power a recommendation engine that measurably improves customer experience. But tracing this through to retention, lifetime value, and bottom-line revenue requires attribution models most organizations have not built.

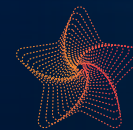
### 4 Governance and Integration Gaps 50% struggle here

Without unified data pipelines, organizations cannot establish a pre-AI performance baseline, track incremental improvements, or define the counterfactuals needed for rigorous analysis. You cannot measure what you cannot connect.

## Why Existing Frameworks Break Down for AI

Why don't the tools we already have work? Finance teams use ROI. Marketing teams use ROMI, LTV/CAC, and attribution models. Strategy teams rely on marketing mix modeling. Each was built for a specific purpose and served it well in a world where investments were discrete, channels were separable, and costs were visible. AI breaks all three assumptions.

Framework	What It Does Well	Where It Breaks for AI
ROI	Measures return on a defined capital outlay with clear boundaries.	Undercounts AI costs. Misses infrastructure, data prep, talent, and integration buried across department budgets.
ROMI	Isolates marketing spend from total investment for channel-level comparison.	Treats AI as a marketing line item when it's an enterprise capability. Cannot account for shared infrastructure or cross-functional AI spend.
LTV/CAC	Links customer acquisition cost to long-term value. Good for unit economics.	Measures customer outcomes, not AI efficiency. Cannot tell you whether AI or the sales team or seasonal demand drove the improvement.
Attribution Models	Assigns credit across touchpoints in a customer journey.	Over-credits AI. When AI influences every touchpoint, attribution models inflate AI's contribution by counting it multiple times across the journey.
MMM	Uses statistical modelling to estimate channel contribution at a portfolio level.	Too slow and too aggregated. Operates on quarterly or annual cycles. Cannot isolate AI-specific effects from broader channel performance.



The tools that brought discipline to digital marketing, including attribution models, marketing mix analysis, and controlled experiments, were not built for algorithmic, always-on, multi-touch systems. The measurement infrastructure most organizations rely on today was designed for a different era. That is the structural gap.

## Where AI Investment Actually Pays Off

Not all AI applications deliver equal returns. Our survey reveals a clear hierarchy: three use cases consistently distinguish top-quartile performers from the rest.

Cited by **57%** of respondents

### Customer Segmentation and Targeting

AI-powered segmentation goes beyond demographics to include behavioral and predictive signals, identifying micro-segments that manual analysis would miss. A Tier-1 European telco applied AI-driven micro-segmentation to identify high-propensity subscriber clusters that manual analysis had overlooked. The operator combined clustering algorithms with propensity models for plan upgrade likelihood, churn risk, and cross-sell opportunity. Conversion rates in the targeted segments rose 22% versus a matched control group, a gain sustained across two consecutive quarters.

Cited by **43%** of respondents

### Campaign Automation and Optimisation

AI manages the complexity of multi-channel, multi-variant campaigns. A Tier-1 APAC telco deployed AI-driven send-time optimization and real-time budget reallocation across retention campaigns. The system shifted spend toward high-performing variants within hours, not weeks. AI-optimized campaigns outperformed manually managed ones by 31% on the primary conversion metric, as measured by randomized holdout groups over six months.

Cited by **41%** of respondents

### Predictive Personalisation and Recommendations

Collaborative filtering and deep learning identify patterns that rule-based systems cannot detect. A US-based telco integrated recommendation engines across its digital self-service channels (app, web portal, and IVR) to deliver personalized plans and add-on suggestions at key lifecycle moments. Using A/B holdout groups, AI-driven recommendations generated 19% of total digital upsell revenue within a year.

Figure 5

## The Revenue Drivers: Which AI Use Cases Actually Pay Off?

Which AI use cases are driving the most revenue/growth for your organization in the last 12 months? (Top 5 shown below)

**57%**  
Customer Segmentation & Targeting

**43%**  
Campaign Automation / Optimization

**41%**  
Predictive Personalization / Product Recommendations

**39%**  
Pricing & Offer Optimization

**36%**  
Demand Forecasting



*What separates organizations that extract value from these use cases is not the AI itself. It is whether they invested in measurement infrastructure, controlled testing, cost consolidation, and attribution to prove that value exists*

## The Real Cost Equation: Revenue Drivers and Hidden Costs

Before any organization can evaluate AI efficiency with confidence, two things need to be clear: what counts as incremental revenue and what constitutes total cost. Most teams get the revenue side roughly right. Almost all undercount the cost side.

### Three Revenue Drivers That Matter

43% of respondents

#### CLTV Improvement

The compounding impact of AI-driven retention and personalization across the full customer relationship. To isolate it, compare the lifetime value of AI-engaged customers with that of propensity-matched control groups over 6–12-month windows. An European telco found that subscribers who were touched by AI-driven retention journeys had a 15% higher lifetime value than matched peers who received standard communications.

40% of respondents

#### Acquisition Efficiency

Does AI-driven lead scoring and lookalike modeling acquire more customers or the same volume at a lower cost? Compare cost per acquisition between AI-optimized and traditional channels.

38% of respondents

#### Conversion Lift (38% of respondents).

A direct improvement driven by AI-optimized journeys, personalized content, and intelligent offer sequencing. The most defensible method: A/B holdout testing (AI conversion rate minus control rate), multiplied by traffic and average order value. This is the most direct path to incremental revenue that withstands board-level scrutiny.

### Three Cost Blind Spots That Distort the Picture

Most organizations undercount costs by focusing on software licensing while overlooking the structural expenses that keep AI running:

Tracked by 62%

**Software Licensing / API Fees** is the most visible cost category, covering subscriptions to platforms such as OpenAI and Azure OpenAI, vendor-specific AI tools, and marketing automation platforms with embedded AI.

Tracked by 56%

**Cloud Infrastructure (tracked by 56%).** Training, inference, storage, and pipeline maintenance consume significant cloud resources. Use provider cost-allocation tools such as AWS Cost Explorer, Azure Cost Management, and GCP Billing, to tag AI-specific compute and bandwidth. One EU-based telco found that the ongoing computing costs of running its real-time recommendation engine (the processing power required each time the system analyzed a customer and served an offer), were three times the original licensing estimate once cloud compute and data transfer charges were properly allocated.

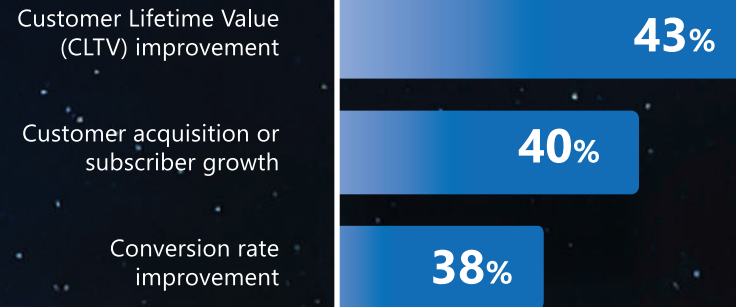
Tracked by 41%

**Hardware and GPU** On-premises or hybrid AI workloads require capital expenditure on GPUs, servers, and networking. Amortize hardware over 3–5 years. Include power, cooling, and data center costs.

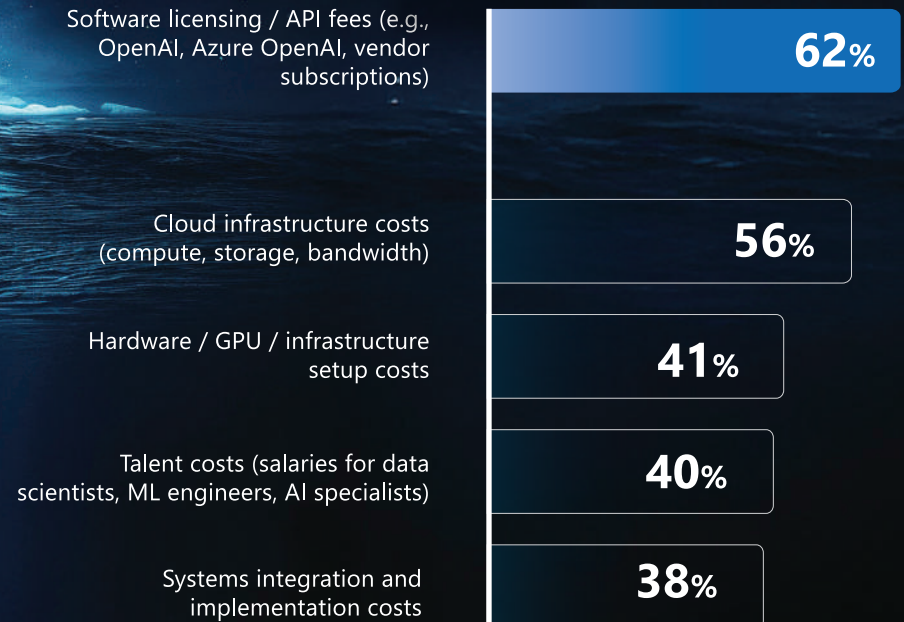
**Talent and Integration (widely underreported).** Data engineers, ML specialists, integration work, and ongoing model maintenance constitute the highest hidden cost. These costs span HR, IT, and departmental budgets. Without mapping them, the cost base is incomplete by an estimated 30–50%.

Figure 6

In the last 12 months, which of the following revenue metrics have you tracked for AI-powered marketing initiatives? (Top 3 categories shown below)



Which cost categories are included in your AI cost calculations? (Top 5 categories shown below)



## Why Promising AI Initiatives Still Fail

An AI initiative can deliver strong test results and still be shut down. A personalization engine that takes 18 months to deploy misses its window. A recommendation system that lifts conversion rates but also repeatedly targets customers with irrelevant or intrusive offers, because the underlying model cannot be explained or corrected, erodes trust faster than it builds revenue. A campaign optimizer that fails a governance audit never reaches scale.



Efficiency on its own is fragile. Our findings point to three operational dimensions: Speed, Experience, and Trust that determine whether a strong AI initiative survives contact with reality.

### Speed

Time-to-value determines whether efficiency arrives in time to matter

**54%** *struggle to define and track AI deployment cycle time*

#### What breaks if you ignore this:

A strong AI initiative that takes 24 months to deploy reaches breakeven 6–12 months later than one that deploys in 9 months. In competitive markets, that delay costs more than the initiative earns. A Tier-2 European telco saw this play out. Its AI-based next-best-offer engine performed well in pilots but required 14 months of integration before going into

production. By launch, a competitor had already shipped a similar capability, and the commercial window had narrowed.

#### What to track:

Days from approval to production. Quarters from deployment to breakeven. Year-over-year improvement in cycle time.

### Experience

Customer impact that cannot be linked to revenue will be systematically undervalued

**57%** *cannot connect AI-driven satisfaction changes to revenue impact*

#### What breaks if you ignore this:

If a better customer experience cannot be tied to retention, lifetime value, and revenue, the initiative looks like overhead. When budgets tighten, unmeasured CX improvements are the first to go, even when they are quietly driving the numbers other teams take credit for. A North American telco encountered this with its AI-powered chatbot. The bot reduced average handling time by 35% and increased first-contact resolution scores.

However, the CX team could not link those gains to lower churn or NPS-driven revenue, so the initiative was flagged for cost reduction in the next budget cycle.

#### What to track:

AI-specific NPS/CSAT (not the overall brand score), retention attribution to AI touchpoints, and support effort reduction.

### Trust

Governance costs are invisible until they become catastrophic

**58%** *find AI explainability and interpretability significantly challenging to measure*

#### What breaks if you ignore this:

Trust does not appear in cost calculations until a model makes a discriminatory decision, a regulator issues a finding, or a customer-facing algorithm produces an unexplainable output. At that point, the cost is not incremental; it is existential. This risk is especially acute for EU-based telcos, where the AI Act imposes tiered compliance obligations. Telcos using AI

for credit scoring, fraud detection, or network-level decisions may be classified as high risk, triggering mandatory transparency, auditability, and human oversight requirements.

#### What to track:

Quarterly bias audit completion. Model explainability scores (above 75% in production). Audit-to-resolution time. Unplanned model rollbacks.



*Organizations that treat governance, speed, and customer experience as overhead will scale AI faster than their safeguards can support. Those that embed Speed, Experience, and Trust into their operating rhythm will compound advantage over time.*

## Five Patterns That Separate Leaders from the Rest

When we compared the 12% of organizations that can demonstrate AI's revenue impact with those that cannot, five patterns emerged. These are not theoretical recommendations. They are observed behaviors and structural choices that distinguish organizations with defensible AI economics from those still relying on intuition.

### Pattern 1:

#### **CFO–CMO alignment is tight and deliberate**

Organisations with strong AI economics do not treat measurement as a marketing problem. Finance owns comprehensive cost capture across infrastructure, talent, and integration. Marketing owns the revenue attribution through controlled testing and customer models. In every high-performing organisation, this split is explicit, agreed upon, and reviewed quarterly.

### Pattern 2:

#### **They measure one initiative perfectly before scaling measurement across the portfolio**

Organisations that attempt portfolio-wide measurement from the start report lower confidence in their results than those that begin with a single flagship. High performers select their single largest AI investment, usually customer segmentation, personalisation, or campaign optimisation, and commit to measuring it with full rigour: comprehensive cost accounting, controlled A/B testing, and quarterly tracking for at least 12 months.

### Pattern 3:

#### **Capital moves toward proven efficiency, not momentum**

Among the top-performing organisations in our survey, a common practice emerged: systematic reallocation of 20–30% of AI budget annually from the lowest-efficiency initiatives to the highest. This was not ad hoc. It was embedded in planning cycles with clear thresholds, initiatives that failed to reach breakeven within a defined window were exited, and capital was redirected to initiatives with demonstrated returns.

### Pattern 4:

#### **Governance is treated as insurance, not overhead**

Organisations that scale AI successfully do not view bias audits, explainability tooling, and compliance reviews as costs to be minimised. They treat them as the insurance premium that enables aggressive scaling without fear of catastrophic failure. Organisations with quarterly governance cycles are significantly more likely to expand AI initiatives than those without, not because governance made AI better, but because it gives leadership the confidence to invest more.

### Pattern 5:

#### **Integration infrastructure is a deliberate investment, not an afterthought**

You cannot link AI costs across finance, procurement, and cloud billing to revenue outcomes in CRM, marketing automation, and analytics without deliberate integration. High performers map where cost data and revenue data live, identify the gaps, and commit 6–18 months to building the connective tissue.



## The Closing Window

Three years from now, the AI marketing landscape will be divided into two groups. Not by who spent the most. Not by who adopted the fastest. But by those who can prove their AI works.

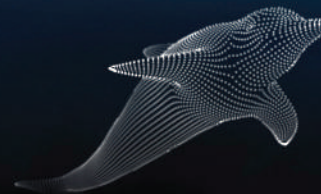
Organizations that build measurement discipline now will scale with confidence, reallocate capital toward proven initiatives, and earn board trust through demonstrated economic results. Organizations that delay will find themselves building measurement infrastructure while defending why existing investments cannot be proven to work.

Both groups will have access to the same technology, including the same large language models, recommendation algorithms, and campaign automation platforms. The technology will not be the differentiator.

The next 18 months are a narrow window. Today, rigorous AI efficiency measurement is a competitive advantage. Within two years, it will be a baseline expectation. The organizations that build this capability now will set the benchmarks against which everyone else is measured.



**Soon, the question will not be whether you use AI.  
It will be whether you can prove it works.**



## Methodology and Demographics

Comviva commissioned Curious Insights, an independent global market research firm, to conduct an online panel survey of over 200 senior IT and business executives at retail and e-commerce companies and telcos worldwide. The sample was distributed across North America, Europe, the Middle East, Africa, and the Asia-Pacific region.

## About Comviva's Research Centre

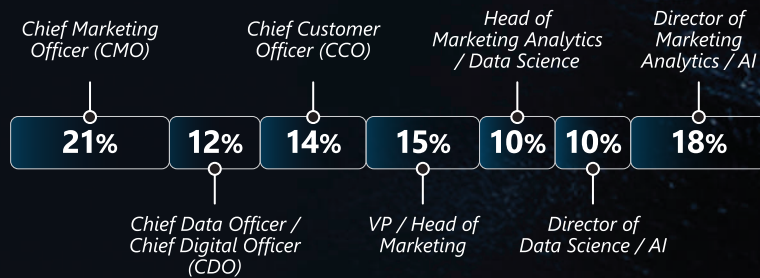
Comviva's Research Centre examines current and future trends shaping digital transformation across telecom, retail, and enterprise operations. The Centre provides research and analysis of business and technology trends, collaborating with business, technology, and academic thinkers on the evolution of enterprise AI adoption and capital productivity.

### Q1: Which industry sector best describes your organization?

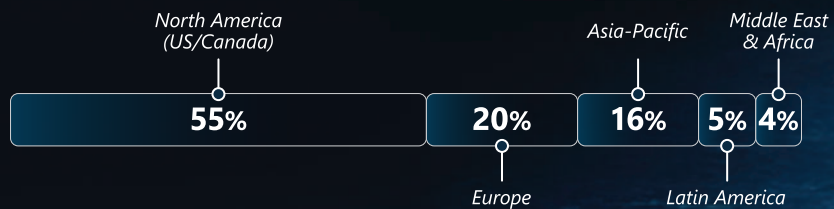
50% Telecommunications

50% Retail & E-commerce

### Q2: What is your primary job title?



### Q3: In which geographic region is your organization's headquarters located?





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