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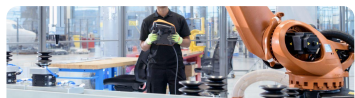


**Thomas Kurian**  
CEO, Google Cloud

# Our Strategy

Accelerate every organization's ability to  
**digitally transform** with leading Digital and AI Platforms

# Google Cloud



Infrastructure



Developer



Data Analytics



Security



Applications

 AI Platform & Models

 Global Infrastructure



# AI Infrastructure

Google Cloud  
Differentiators

✓ Accelerator Choice   ✓ Best Performance   ✓ Best Cost Performance   ✓ Uptime & Security

Training and Inference APIs

Dynamic Workload Scheduling

AI Software Foundation: Compilers, Frameworks, Security

High Scale Systems Design

Accelerators

GPU

TPU

Storage

Obj.

Block

File

Networking

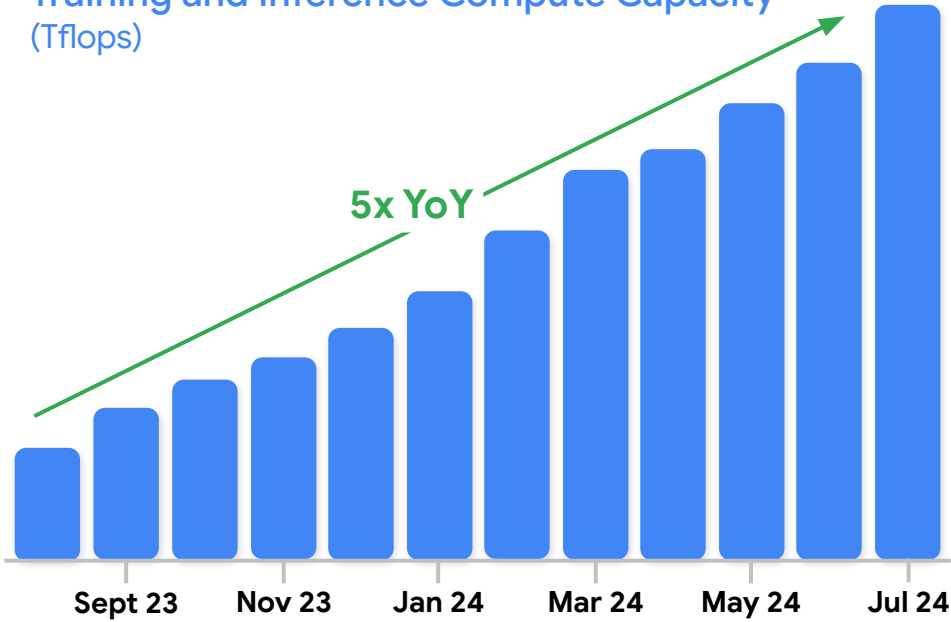
Cluster

Backbone



# AI Infrastructure: Rapid Growth

Training and Inference Compute Capacity (Tflops)



Google Cloud AI infrastructure is growing fast:

- 10x** YoY growth in use of AI accelerators on Google Kubernetes Engine
- 150x** More compute instances served per storage volume vs. other Hyperscalers
- >50%** Savings with Dynamic Workload Scheduler vs. on-demand, without long-term commitments



# AI Infrastructure: Examples

AI21labs

ANTHROPIC

 APPLOVIN

 AssemblyAI



BENDING SPOONS

character.ai

 cohere

contextual.ai

 craiyon



 essential AI

**Flipkart**  
Explore Plus



 Lightning AI  
Creators of PyTorch Lightning

 Magic

 MISTRAL AI

nuro

 OctoAI

priceline



 SANDBOXAQ

 Schrödinger

 Spotify

 TWO SIGMA

 Unity

Walmart 

 wayfair



WRITER



Google Cloud helps **Ford** use deep learning to replace traditional computational fluid dynamics models in virtual wind tunnel tests





**Midjourney** uses Google Cloud TPUs to train and GPUs to serve its cutting-edge AI models and empower its community of free expression



# AI Developer Platform

Google Cloud  
Differentiators

✓ 150+ Models

✓ Any Cloud and Any SaaS

✓ End-to-End Platform

## Agent Development Studio

Evaluation

Monitoring

Feedback

Tool Use

Orchestration

Memory

Model Catalog

Tuning

Extensions

Structured Data

Unstructured Data

RAG & Search

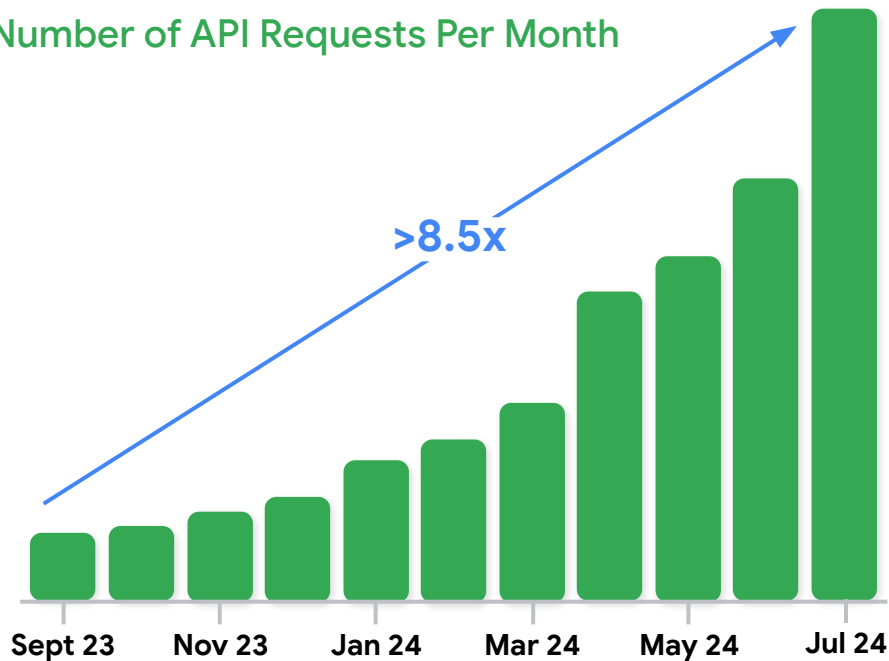
## AI Models

*(Gemini, Imagen, Anthropic Claude, Mistral, Meta Llama)*



# AI Developer Platform: Rapid Growth

Number of API Requests Per Month



Google's AI platform & models, especially Gemini, are seeing strong growth:

**>4x** Growth in Cloud customers using Gemini in 2024

**>2M** Developers building with our AI models

**>2x** QoQ activity with accelerating growth as customers go live



# AI Developer Platform: Examples





**Bayer** is building healthcare applications for radiologists with AI powered Search, Document Creation, and Analysis



**Samsung** has deployed Google's Gemini and Imagen to its Galaxy S24 smartphones, offering safe & intuitive photo editing and summarizing in the blink of AI



# Data Analytics Platform

Google Cloud  
Differentiators

✓ Connect Any Data to Any AI Model

✓ Use Generative AI to Analyze Data

Conversational Analytics Agent

SQL, Spark, Python

ML (*Forecast, Predict,...*)

LLMs

Migrate

Aggregate

Analyze

Visualize

Universal Storage & Governance

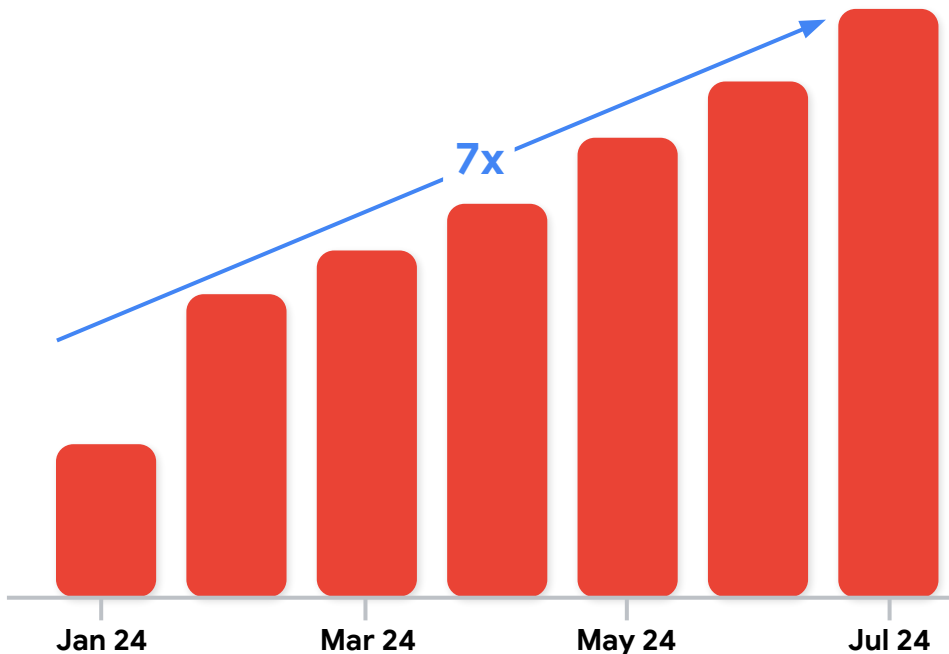
Any Data On Any Cloud

AI Models (*Gemini*)



# Data Analytics Platform: Rapid Growth

LLMs & BigQuery use for model inference



BigQuery is seeing rapid growth:

**80%** Growth in BigQuery ML model operations in the last 6 months

**>4x** Growth in use of Gemini-powered data analysis in the last 6 months

**13x** YoY growth in multimodal data use in BigQuery





# Data Analytics Platform: Examples





**UPS Capital** uses BigQuery to analyze package movements, insurance claims, and address data in real time to identify high-risk locations and anomalies faster



**Hiscox**, one of the oldest syndicates in Lloyd's of London, used BigQuery and Vertex AI to create the first AI-enhanced lead underwriting model, automating quoting for complex risks, from three days down to a few minutes



# Cybersecurity Platform

Google Cloud  
Differentiators

✓ Use AI to Prevent, Detect, & Respond to Threats

✓ On Any Resource, Anywhere

↓ Threat Intelligence

Conversational Security Agent

Prevent

Detect

Respond

Universal Resource Model

Images

Code

Secrets

Entitlements

Data

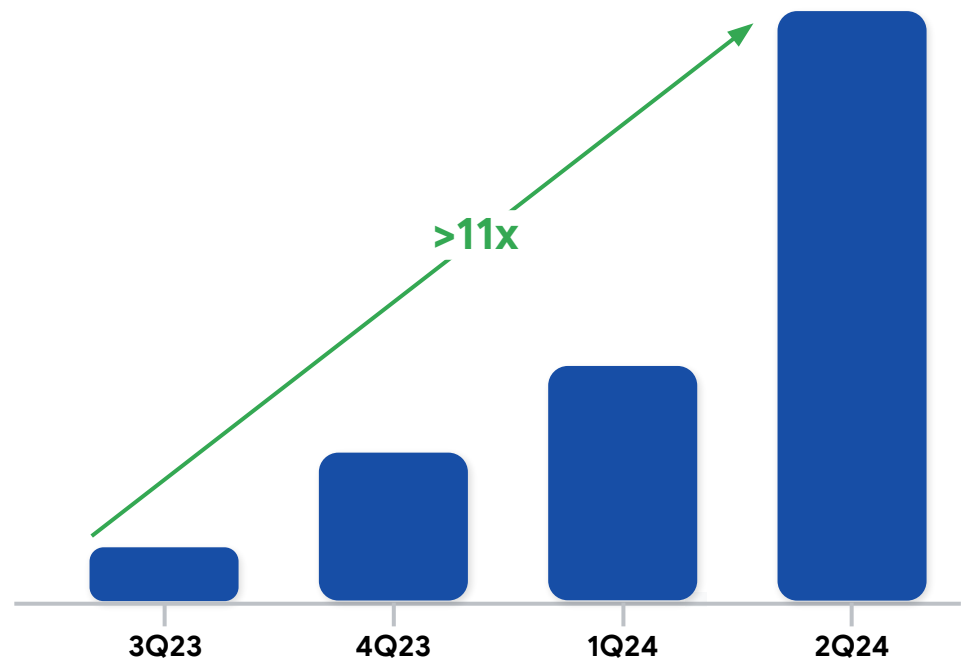
AI Models (*Gemini*)

↓ Workflow



# Cybersecurity Platform: Rapid Growth

SecOps Threat Hunts Performed



Google Cloud's Cyber Platform is seeing strong growth over the last 6 quarters:

**>8x** Number of detection rules run

**3x** Amount of data ingested  
*(run-rate of 600T events & 700PB of data per year)*

**>4x** Customers choosing to protect their enterprise with Google detections



# Cybersecurity Platform: Examples





Gemini in Security Operations is helping **Fiserv** summarize threats, find answers, and detect, validate, and respond to security events faster



Gemini in Security Operations is helping **Apex Fintech** accelerate writing complex threat detections from hours to a matter of seconds





# Customer Experience Agents

Google Cloud  
Differentiators

✓ Multi-Modal Agents

✓ Accuracy & Factuality

✓ Complete Brand and Flow Control

Hospitality

Automotive

Retail

Communications

Agent Development Studio

Chat

Mail

Voice

Web/App

Point of Sale

Call Center

Search

Personalization

Business Rules

Memory

Generative Flow

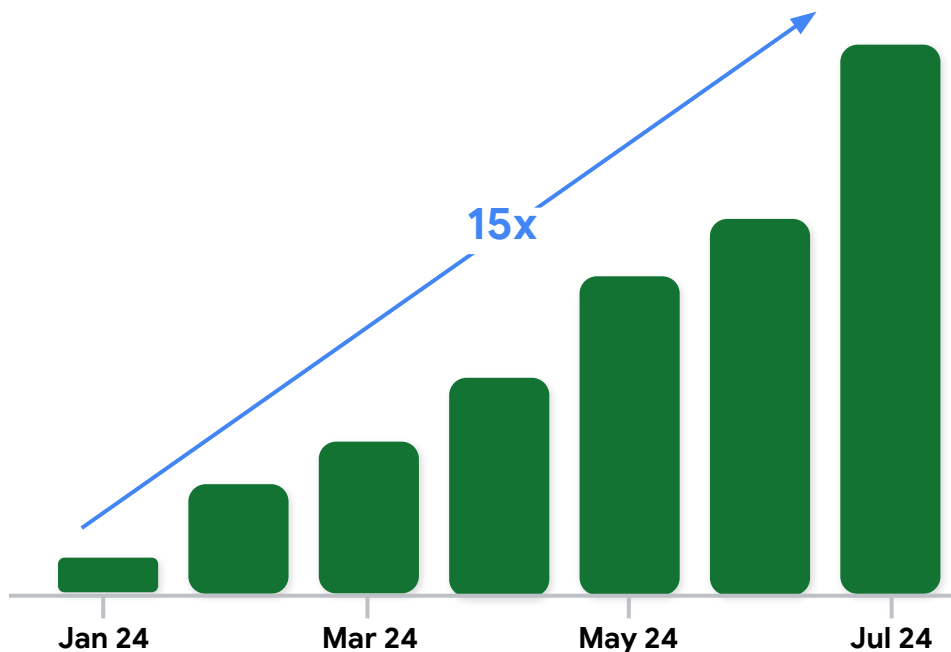
Deterministic Flow

AI Models (*Gemini*)



# Customer Experience Agents: Rapid Growth

Gen AI Agent Traffic



Google Cloud's Generative AI Agents are seeing strong growth in 2024:

**15x** Higher Gen AI Agent usage

**6x** Higher Gen AI Agent adoption

**99%** Gen AI requests are from hybrid agents using both generative and predictive AI



# Customer Experience Agents: Examples

ADORE ME





**Verizon's** customer success team achieves a 60% containment rate and a high rate of call deflection within their chat experience



**GM's** OnStar Virtual Assistant is powered by intent-recognition algorithms using Google Cloud's conversational AI technologies

# Generative AI Revenue Opportunity

Strategy: Win New Customers, Win New Projects, Drive More Product Upsell

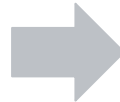
## Land

### Initial Projects

AI Developer Platform

AI Application Platform (Customer Service)

AI Cybersecurity Platform



## Expand

### Upsell Opportunity

AI Infrastructure (Fine Tuning)

API Platform (Apigee)

Enterprise Analytics (Customer 360)

Managed Database (Sensitive Data)

# Continued Focused Go to Market Transformation

## Geographical Expansion

Thoughtful additions to grow capacity efficiently

## Specialization

Focused on Key Buyers, Industries, and Solutions

## Solution Selling

Focused on Business Value, Different from Infrastructure

## Partner Ecosystem








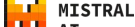










































Top System Integrators and ISVs developing Solutions

## Business Value Methodology

Assessment, Measurement, Change Management

# Broad & Growing Partner Ecosystem

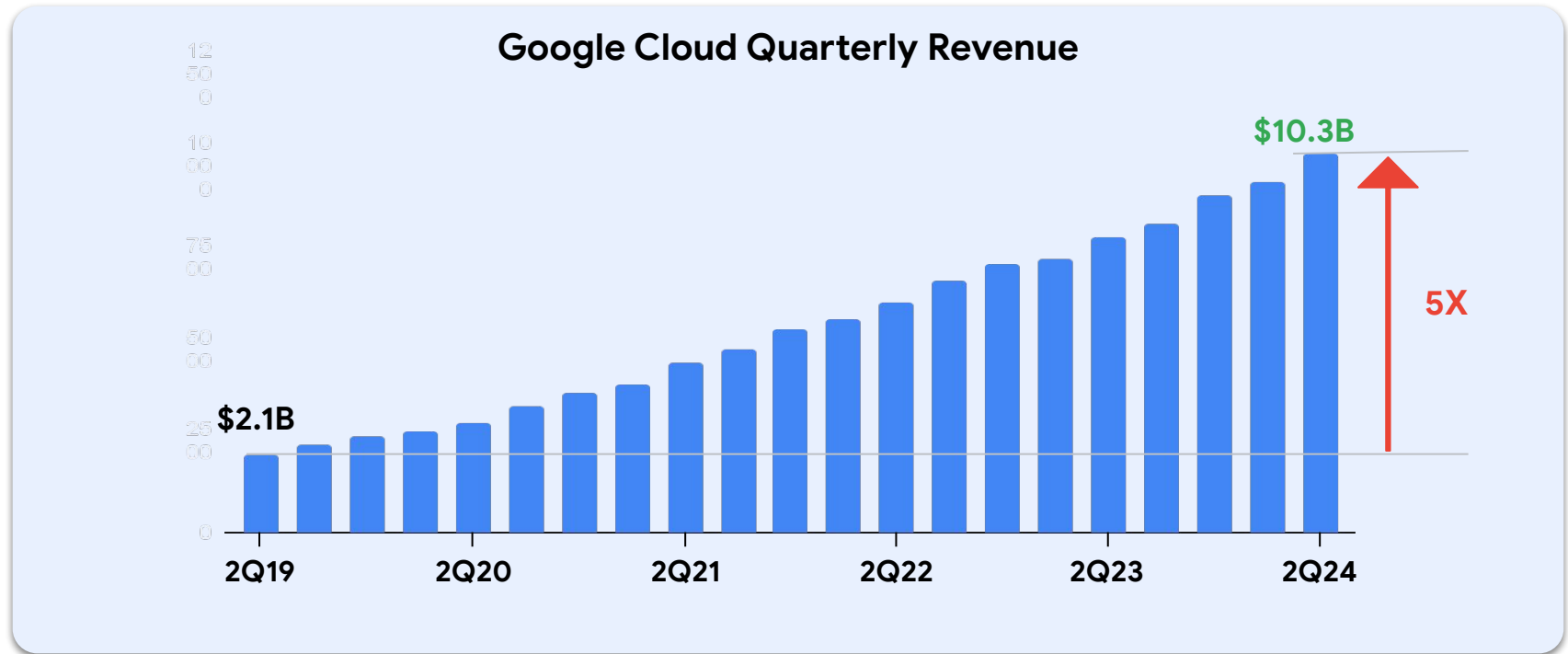
Technology, Incentives, Programs, Certifications, Solutions, Go-to-Market

AI Companies	Tools & Technology Partners	ISVs & SaaS Companies	System Integrators & Consultancies	Midmarket/Reseller
         	         	         	         	         



# Scale & Discipline Drives Revenue Growth

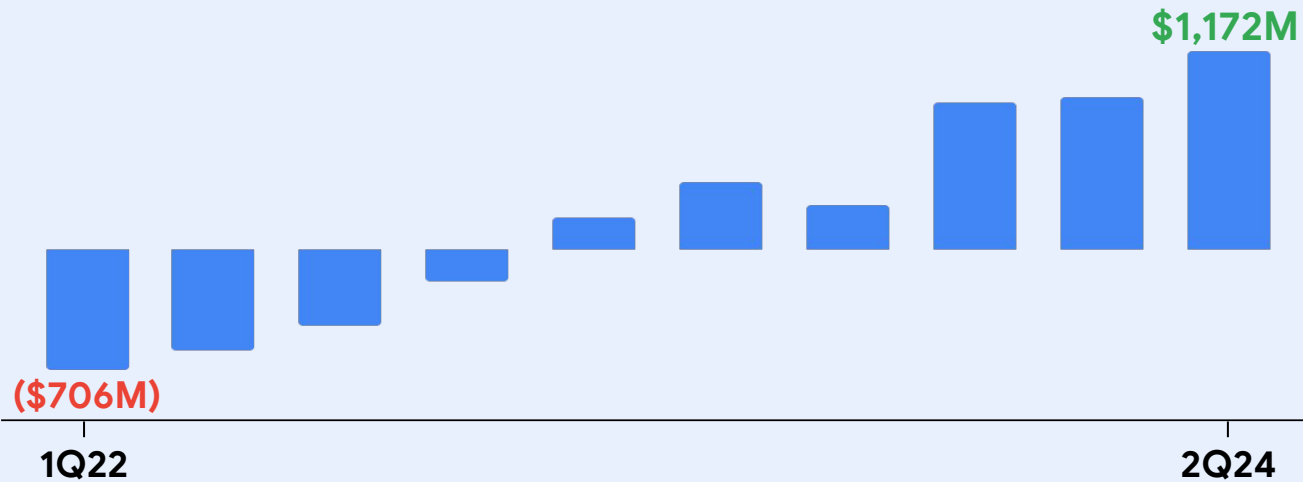
Driven by: New Customers, New Projects, More Product Upsell



# Scale and Discipline Drives Operating Income Growth

Driven by: Engineering Efficiency and Go to Market Efficiency

Google Cloud Quarterly Operating Income



# Strong Business Momentum

Capturing Customers Faster

>130%

increase in first time commit volume from H1 2023 to H1 2024

Winning Larger Deals

>190%

increase in deal value from H1 2023 to H1 2024

Deeper Product Adoption

>30%

YoY growth in products used per customer

Strong Ecosystem Support

>75%

Top ISVs developing Gen AI solutions

Facilitated by Generative AI

Billions

in revenue generated YTD 2024 by our AI Infrastructure and Generative AI Solutions



**Thank you**