



Ha Nguyen Xuan

Data Analytics Lead, Google Cloud

Building a Gen AI-ready Data Ecosystem

Agenda

01

The era of AI

02

How Gen AI will
transform your
business

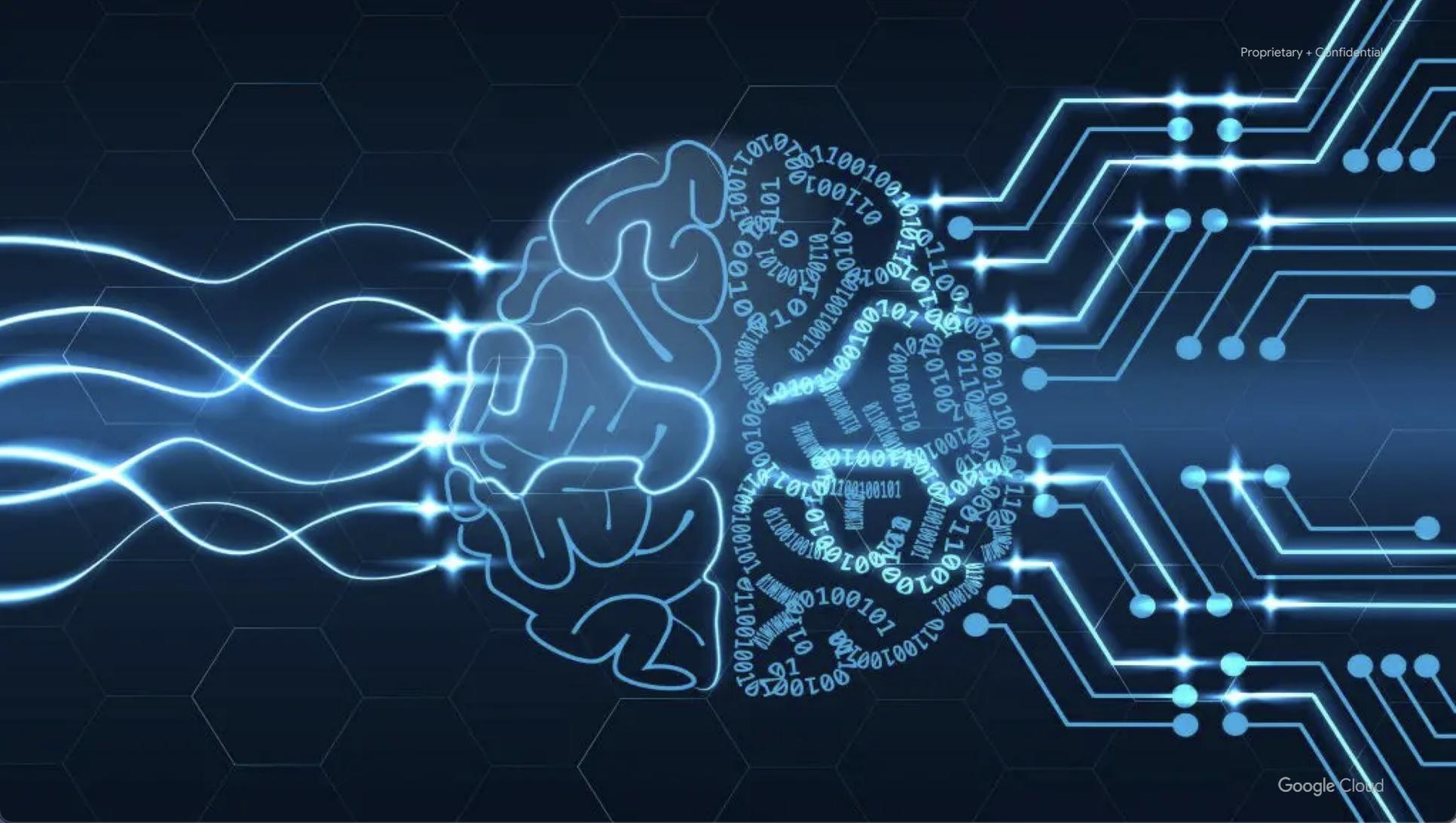
03

Connect your data
ecosystem

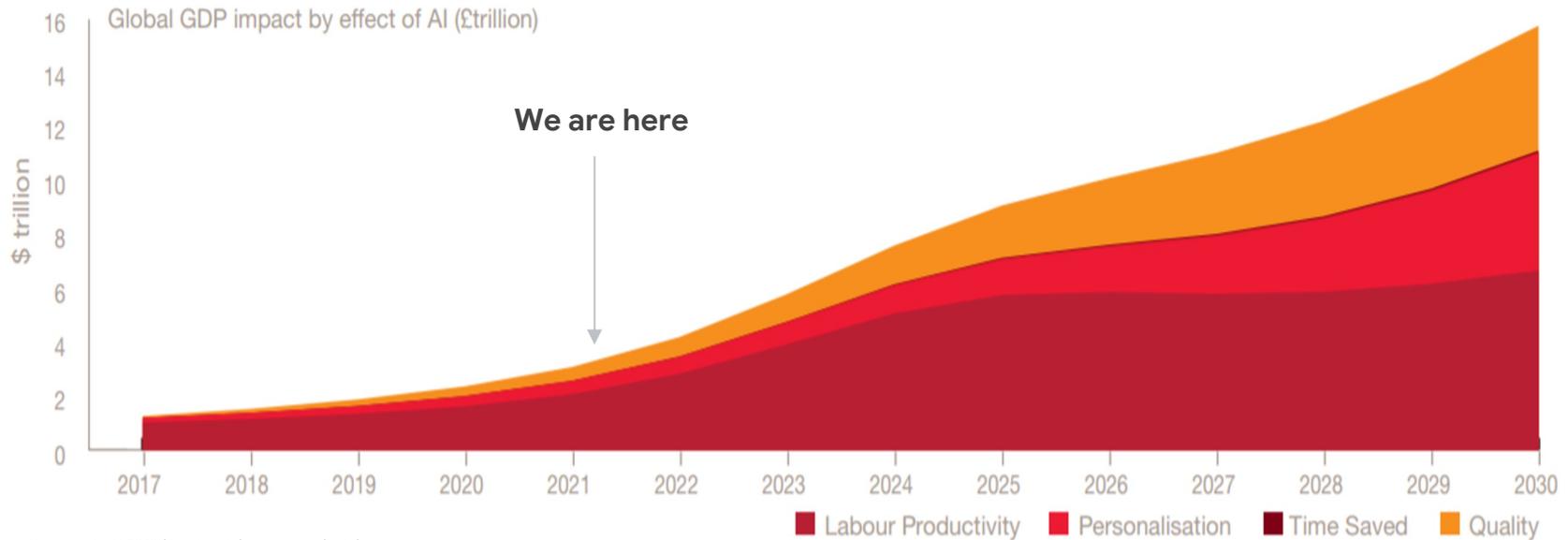
04

Conclusion





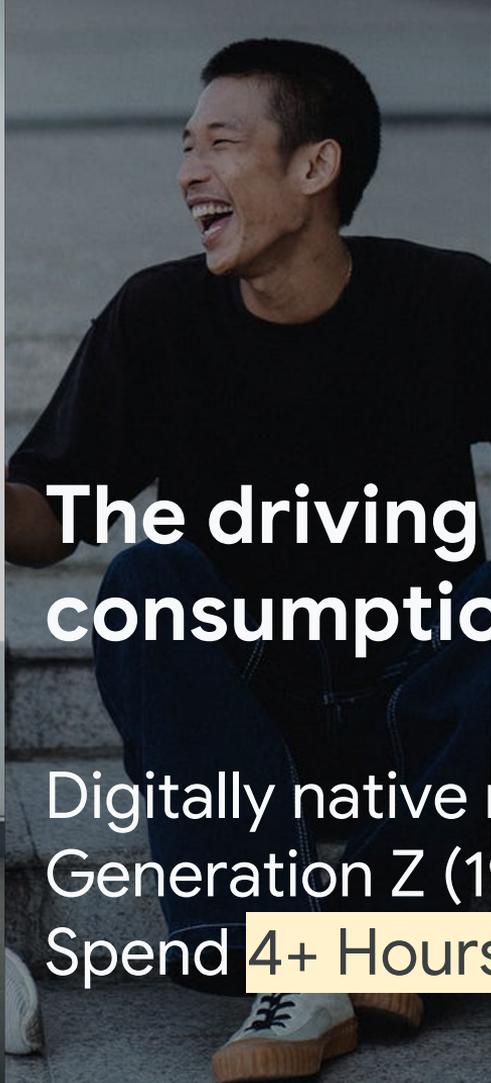
By 2030, AI will be the #1 driver of global GDP growth (+\$16t)



Source: PWC 2019 (chart, data), McKinsey (data)

**For that let's Understand, your
potential customers**



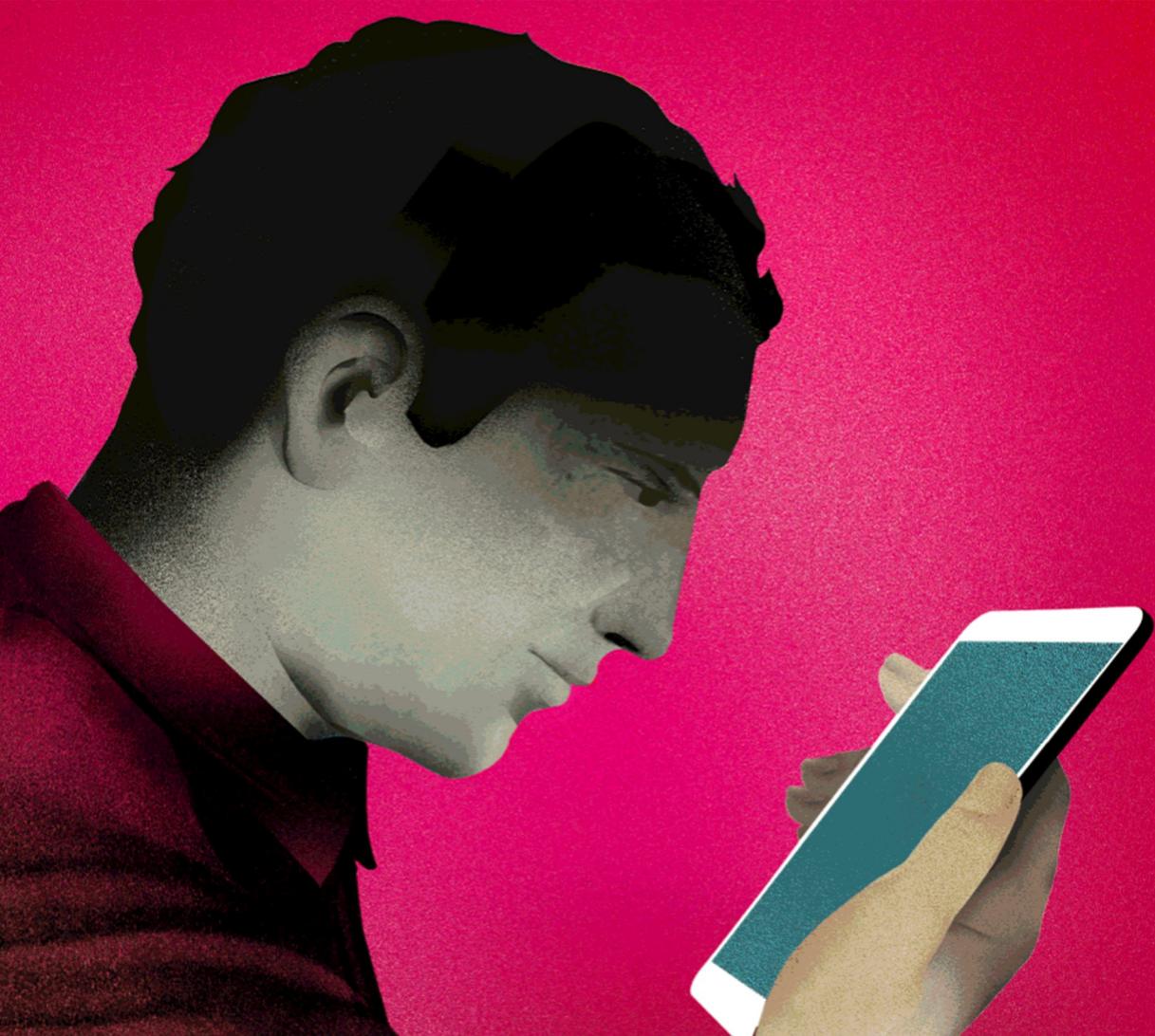


The driving force for digital consumption

Digitally native millennials (1981-1995)

Generation Z (1996-2012)

Spend 4+ Hours across devices



Ping ! Ding ! Chirp
Their attention
Span is reducing
(< 10sec)

**GenZ is used to the
Swipe-Left | Swipe-Right
instant Gratification**



Generative AI

will transform your business



Gen AI will transform every industry



Retail and CPG

Creative Assistance

Conversational Commerce

Customer Service Automation

New Product Development

Improving Employee Productivity

Supply Chain Advisor



Financial Services

Financial Document Search & Synthesis

Enhanced Virtual Assistant

Capital Markets Research

Regulatory Code Change Consultant

Personalized Financial Recommendations



Healthcare & Life Sciences

Digital Patient Concierge

Public & Private Contextual Search

Expedite Prior Authorization Letter

Clinical Trial Report Generation

Customer Service Agent



Media & Entertainment

Media Content Discovery

Creative Assistance

Internal Document/ Media Search

Branded Consumer Interactions

Content Summarization and Metadata



Manufacturing

Machine Generated Events Monitoring

Customer Service Automation

Document Search & Synthesis

Product/Content Catalog Discovery

Supply Chain Advisor



Communications Service Providers

Customer/Employee Service Automation

Network Planning & Operations*

Advertising & Content/Creative Assistance

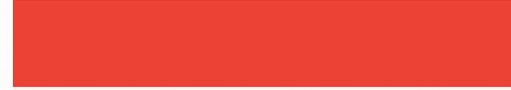
Employee Knowledge Search

Test/Code Script Generation

Contract Analysis & Negotiation

*Network Planning & operations use cases include Network Capacity Planning, Network Root Cause Analysis, and Post Mortem Creation

Radically scale FinServ research capabilities





Capital Markets - Portfolio

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	A	B	C	D	E
1	Ticker	Company Name	Industry	Percent Allocation	
2	ALPHA	Alpha Corp	Technology	3%	
3	BETA	Beta Co	Energy	8%	
4	GAMMA	Gamma Inc	Manufacturing	5%	
5	DELTA	Delta Corp	Transportation	6%	
6	EPSILON	Epsilon Co	Financial Services	7%	
7	ZETA	Zeta Inc	Healthcare	3%	
8	ETA	Eta Co	Agriculture	7%	
9	THETA	Theta Corp	Consumer Goods	3%	
10	KAPPA	Kappa Co	Consumer Services	5%	
11	IOTA	Iota Inc	Real Estate	2%	
12	LAMBDA	Lambda Corp	Technology	3%	
13	MU	Mu Co	Healthcare	2%	
14	NU	Nu Corp	Manufacturing	4%	
15	XI	Xi Inc	Financial Services	1%	
16	OMICRON	Omicron Co	Transportation	2%	
17	PI	Pi Inc	Real Estate	2%	
18	RHO	Rho Corp	Energy	3%	
19	ARCTIC	Arctic Co	Energy	8%	
20	ATLANTIC	Atlantic Corp	Financial Services	2%	
21	BALTIC	Baltic Co	Transportation	4%	
22	CARIBBEAN	Caribbean Inc	Real Estate	6%	
23	INDIAN	Indian Co	Manufacturing	6%	
24	MEDITERRANEA	Mediterranean Corp	Agriculture	1%	
25	NORTH SEA	North Sea Co	Consumer Services	4%	
26	PACIFIC	Pacific Inc	Technology	3%	
27					
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29					
30					

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Summary +

Outline
Headings you add to the document will appear here.

✎ Help me write

Create



Connect your data ecosystem



**INTERNET DATA CENTER SERVICES RECEIVED
ORDER FORM**

SEP 28 1998

Customer Name: Google Inc.
 Form Date: 09/25/98
 Form No.: 0925-pfh
 Installation Site(s): Lawson
 Type of Service(s): New Upgrade
 Additional Cancellation

Half-VDC and Usage Based Bandwidth:

Internet Data Center Services	Brief Description (Detailed description attached)	Qty	Unit Price	Extended Non-Recurring Fees	Extended Monthly Fees
EXO-VDC-S0	Virtual Data Center (7'x4')	1	\$4,000		\$2,700
EXO-VDC-S0SU	Virtual Data Center Setup-(7'x4')	1	\$2,000	\$2,000	
EXO-FAST-U15	15 Mbps base Fast Ethernet with 100 Mbps burstability	1	\$18,000		\$3,750
EXO-FAST-SU	Setup-Fast Ethernet Network	1	\$3,500	\$0	
EXO-FAST-U2	2 Mbps base Fast Ethernet with 100Mbps burstability	1	\$2,400		\$2,400
EXO-FAST-SU	Setup-Ethernet Network	1	\$3,500	\$0	
	Sub Total			\$2,000	\$8,850
	Discounts				
	Total:			\$2,000	\$8,850

Usage above 15 Mbps:

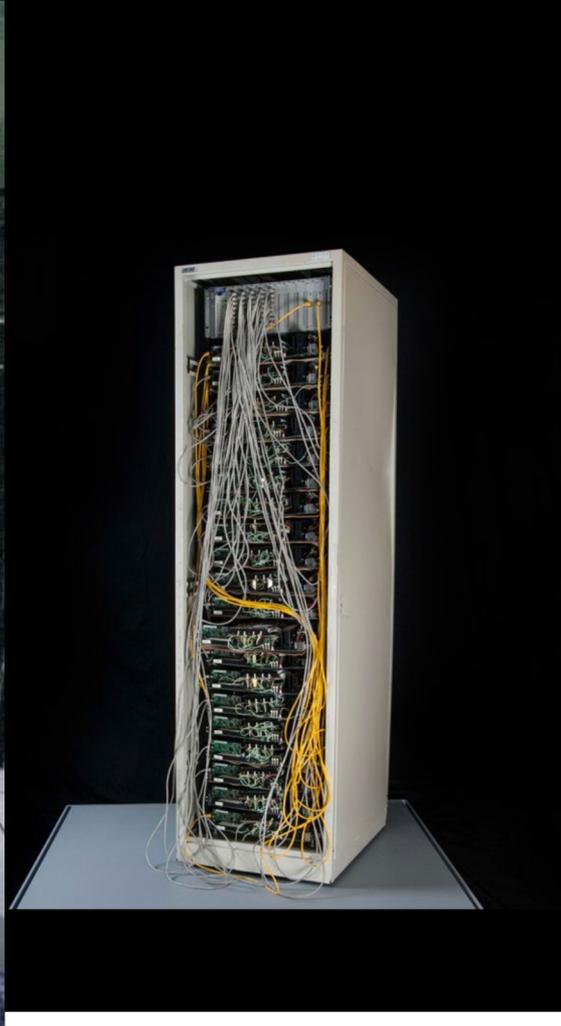
Internet Data Center Services	Brief Description (Detailed description attached)	Qty	Per Megabit
EXO-FAST-VU15	Variable Usage Cost per Megabit Above Base Amount (\$/megabit)	1	\$1,400

Usage above 2 Mbps:

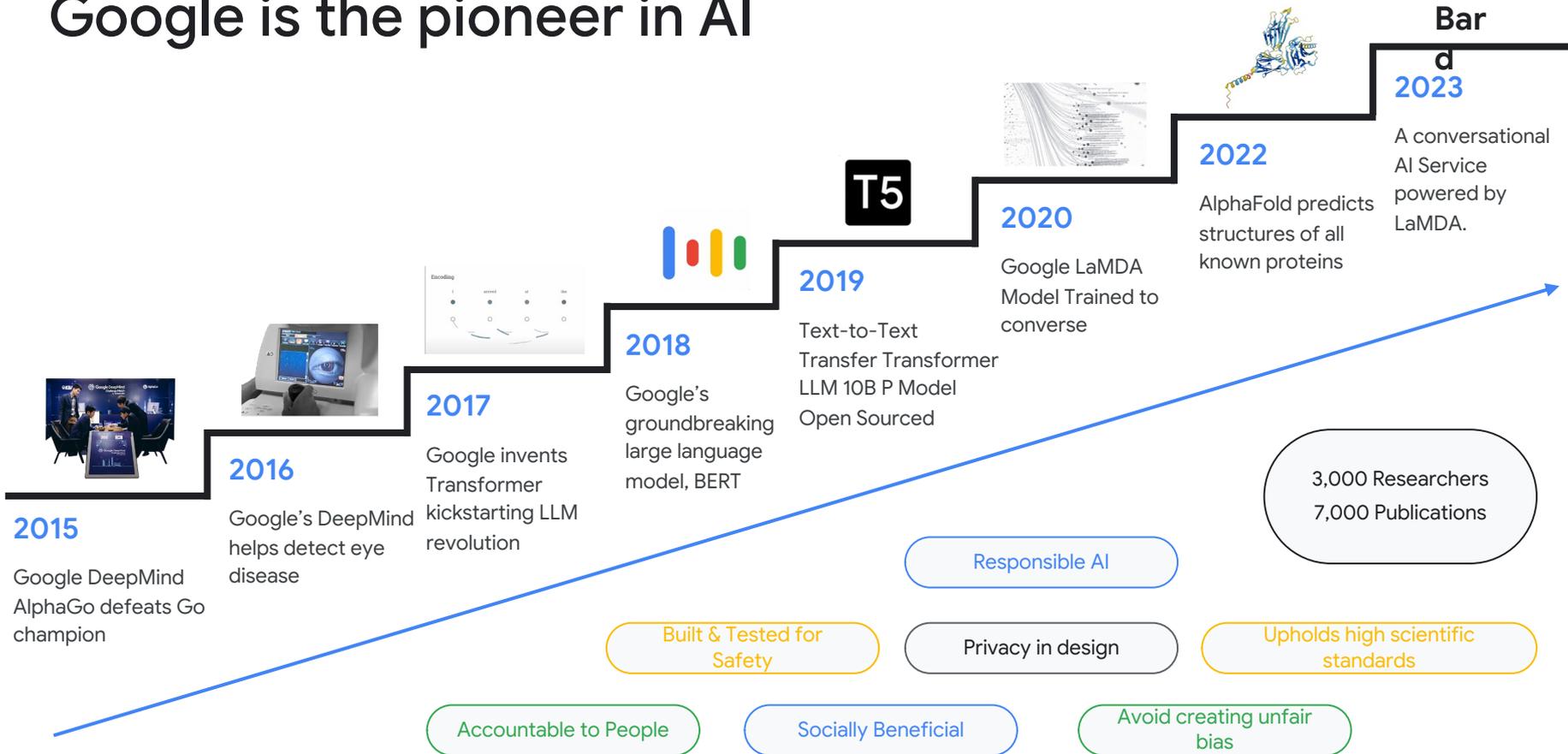
Internet Data Center Services	Brief Description (Detailed description attached)	Qty	Per Megabit
EXO-FAST-VU2	Variable Usage Cost per Megabit Above Base Amount (\$/megabit)	1	\$1,400

Note: Includes a reasonable number of re-boots per month
 Press release Q1 99.

3 20 AMPs in VDC *JAH* CUSTOMER'S INITIALS LP

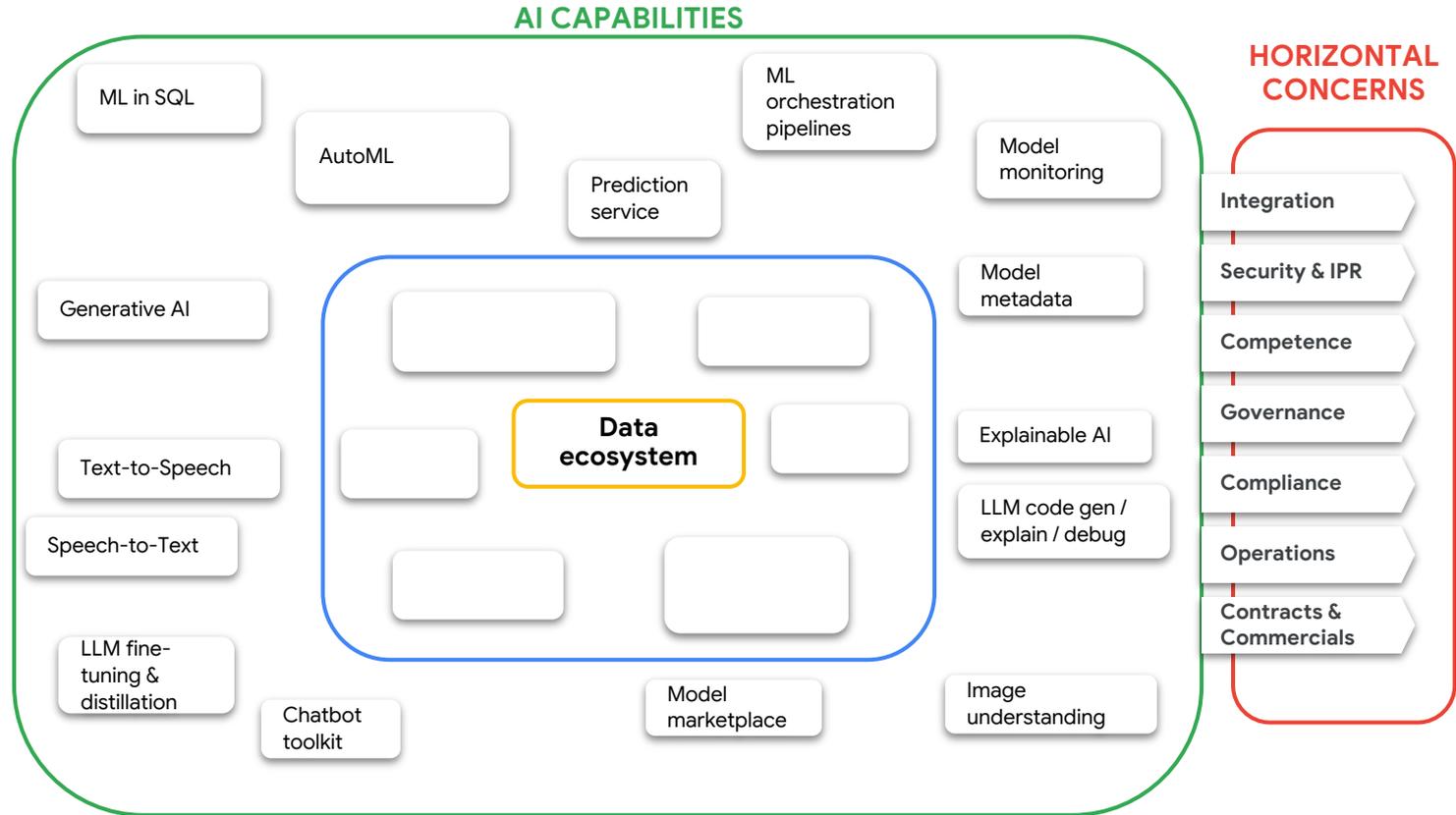


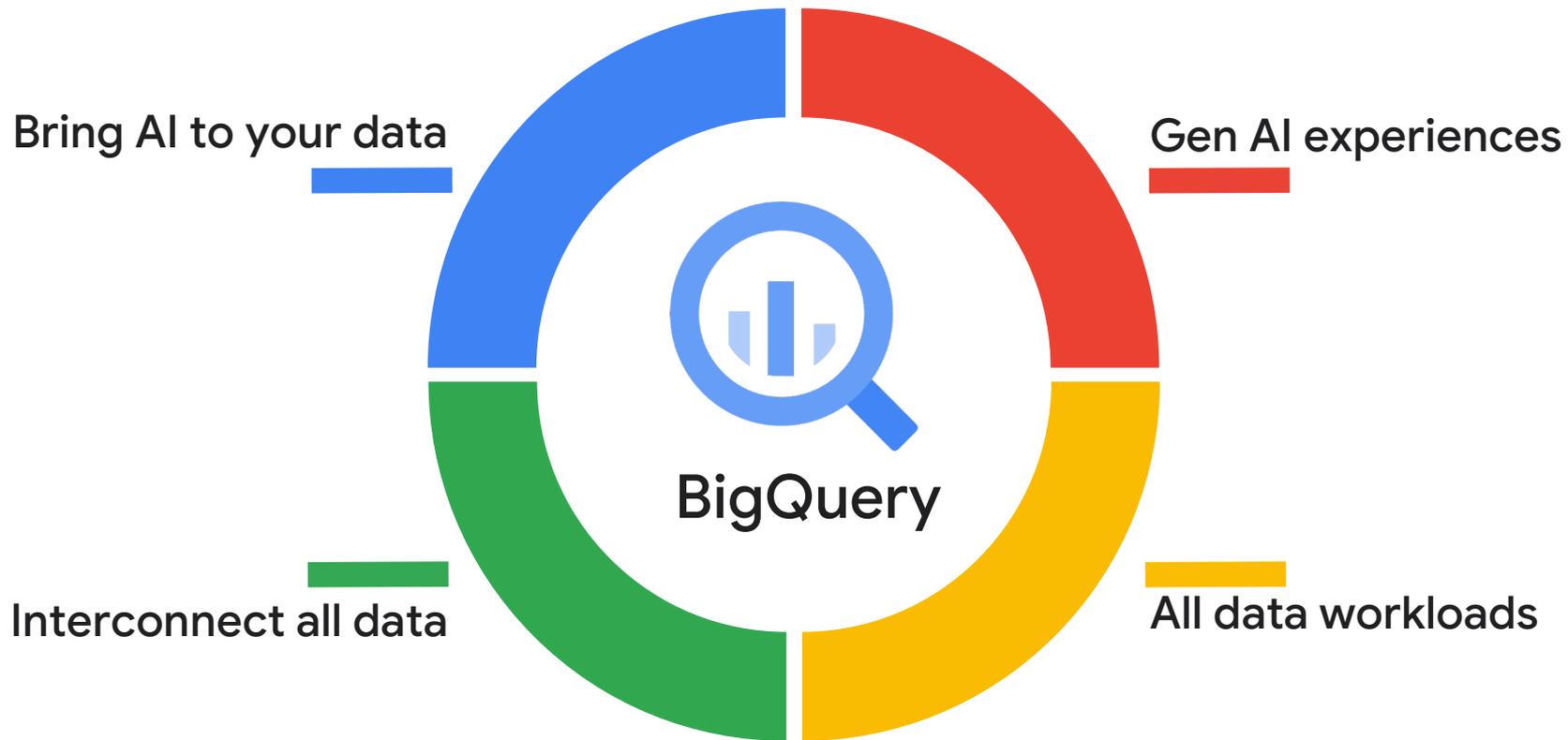
Google is the pioneer in AI



Data-powered AI ecosystem

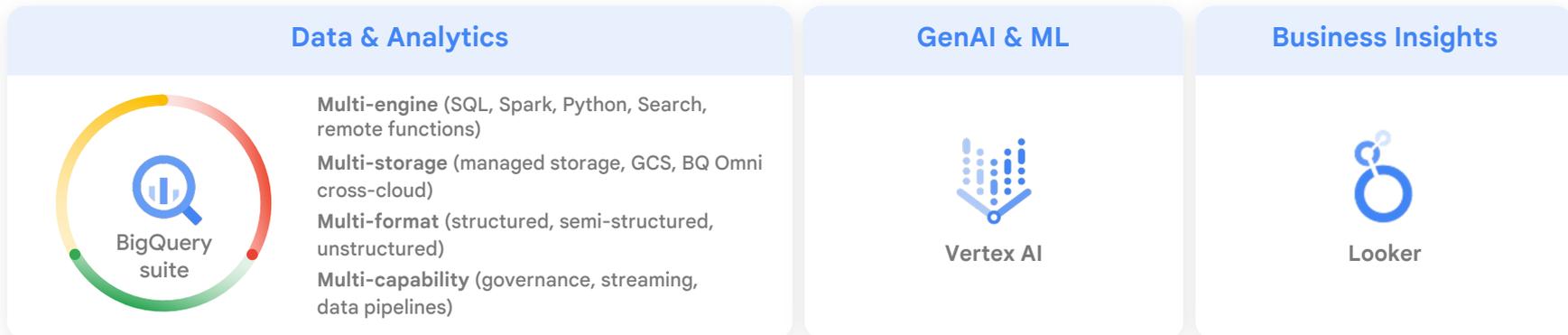
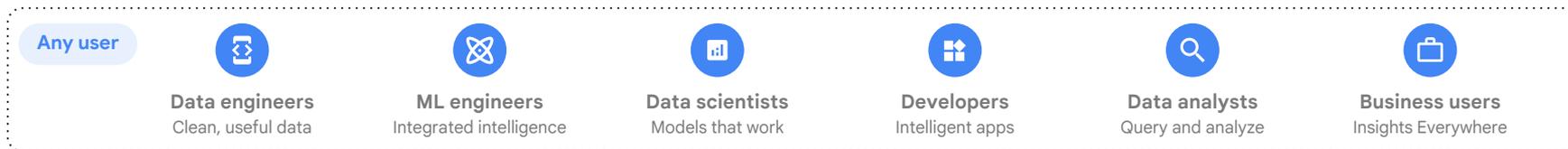
At the heart of AI, you need a Data ecosystem.





Google's Data and AI Cloud

Simplifying data and AI experiences for all users with Gen AI

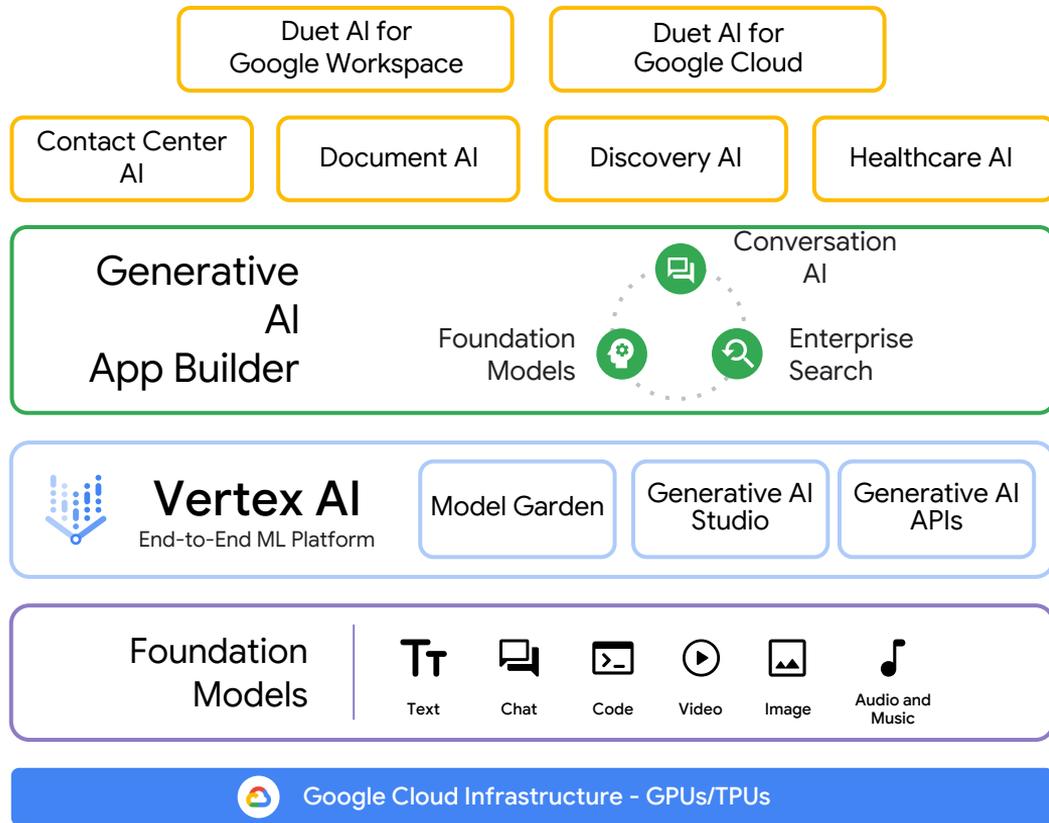


Foundation models (text, chat, code, video, image, audio)

 **Google Cloud infrastructure: GPUs/TPUs**

Cloud AI Portfolio

To support the needs of **Generative AI** centric enterprise development



 Business Users

 Developers

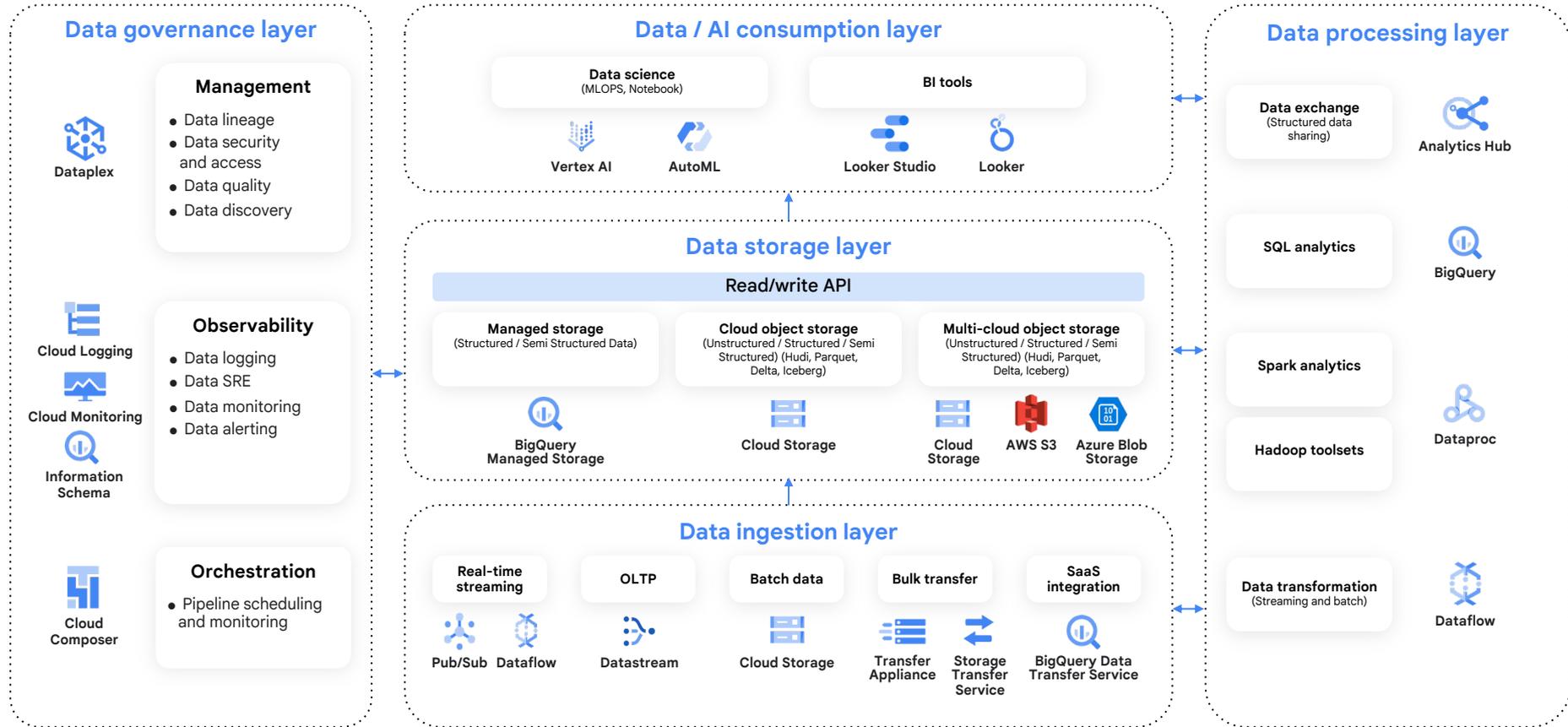
 AI Practitioners

Data Infrastructure and GenAI

With Analytics Lakehouse, you don't have to choose. Google's Data and AI Cloud gives you the best of both worlds, while enabling you to leverage power of Generative AI.

	Data warehouse (TB scale)	Data lake (PB scale)	Data & AI Lakehouse
Use case characteristics	Answer "known" questions Access "known" data (understand your business)	Answer "unknown" questions Access "unknown" data (explore your business)	Answer past, present, and future questions whether you planned for it or brand new insights
Data type and access	Structured and semi-structured data SQL access	Unstructured and semi-structured data Programming languages	Unstructured, semi-structured, and structured data Natural Language and Any SQL/Programming Language

Google Data & AI Lakehouse architecture





Conclusion

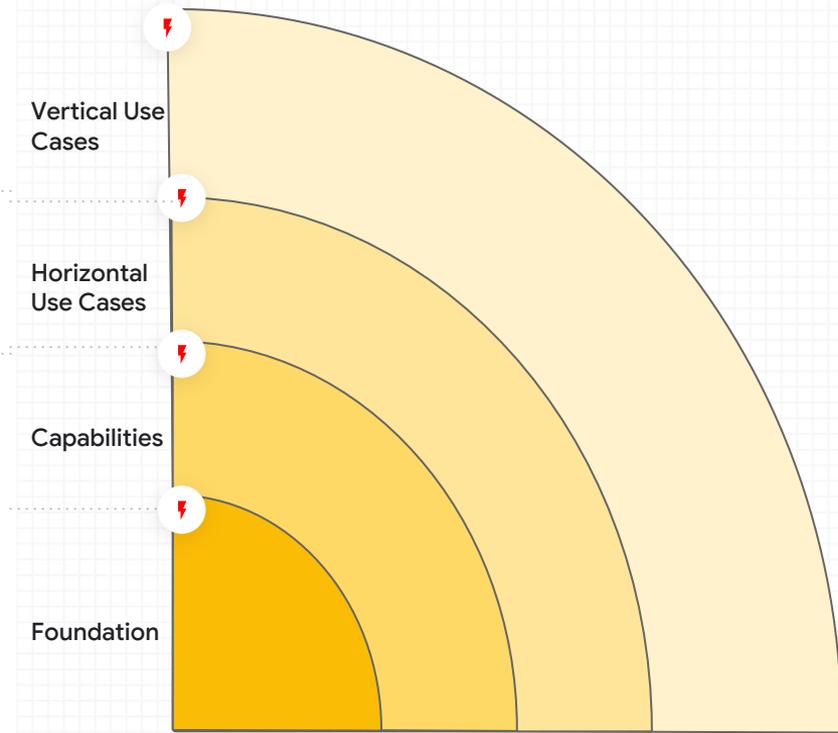


How We Think About the GenAI Stack

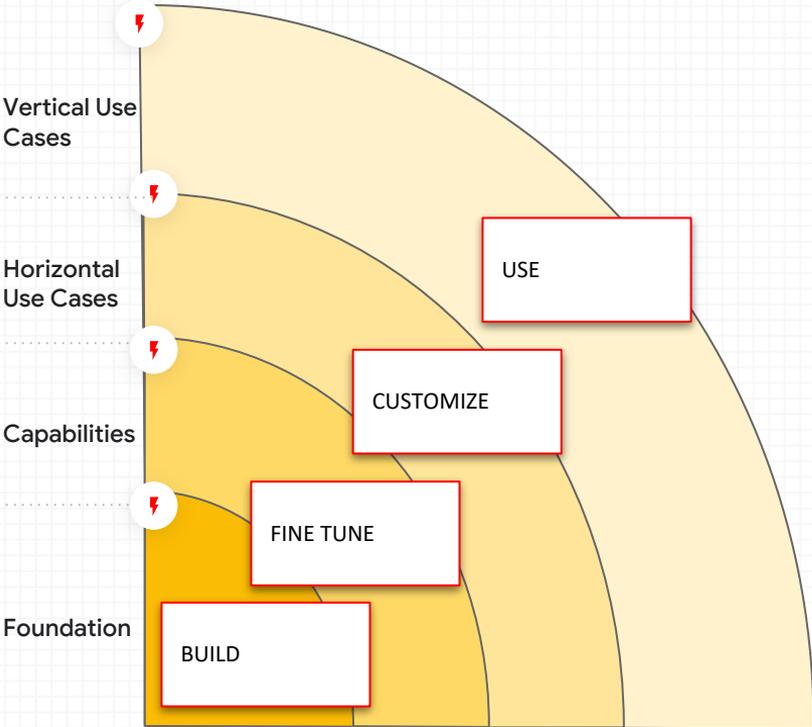
Proprietary + Confidential



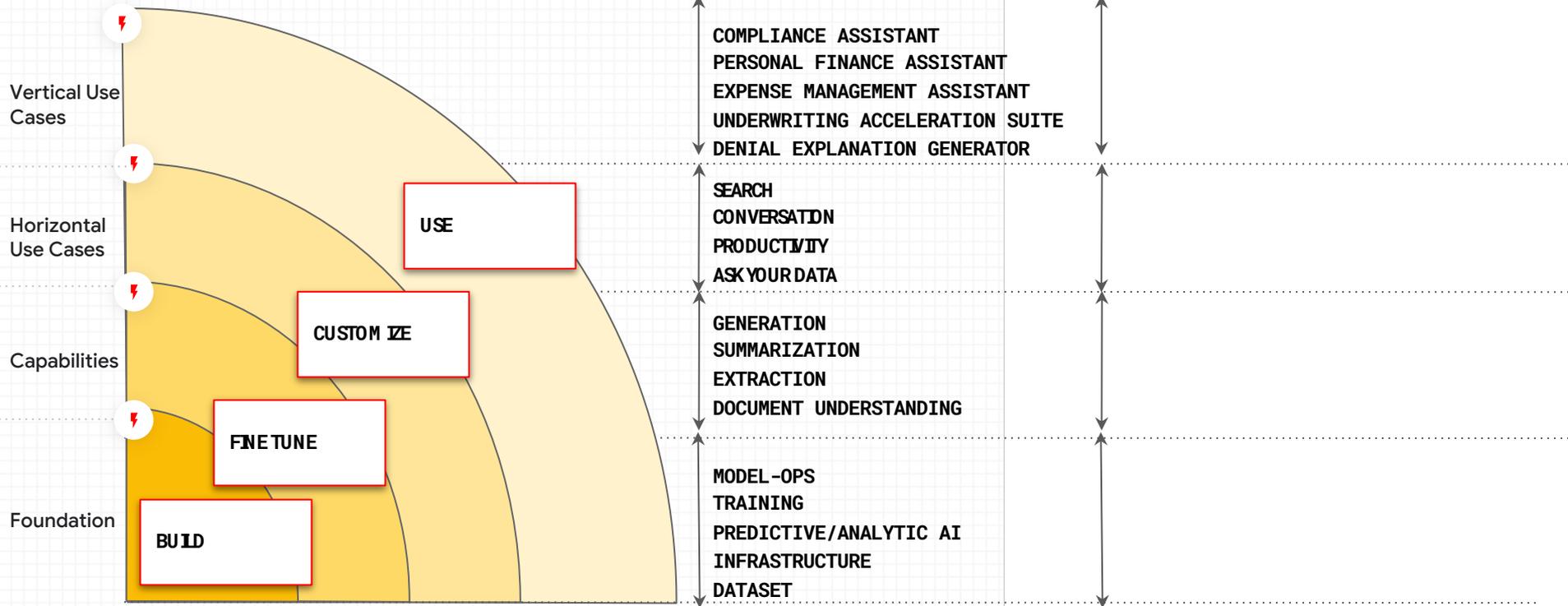
Layered Cake of AI



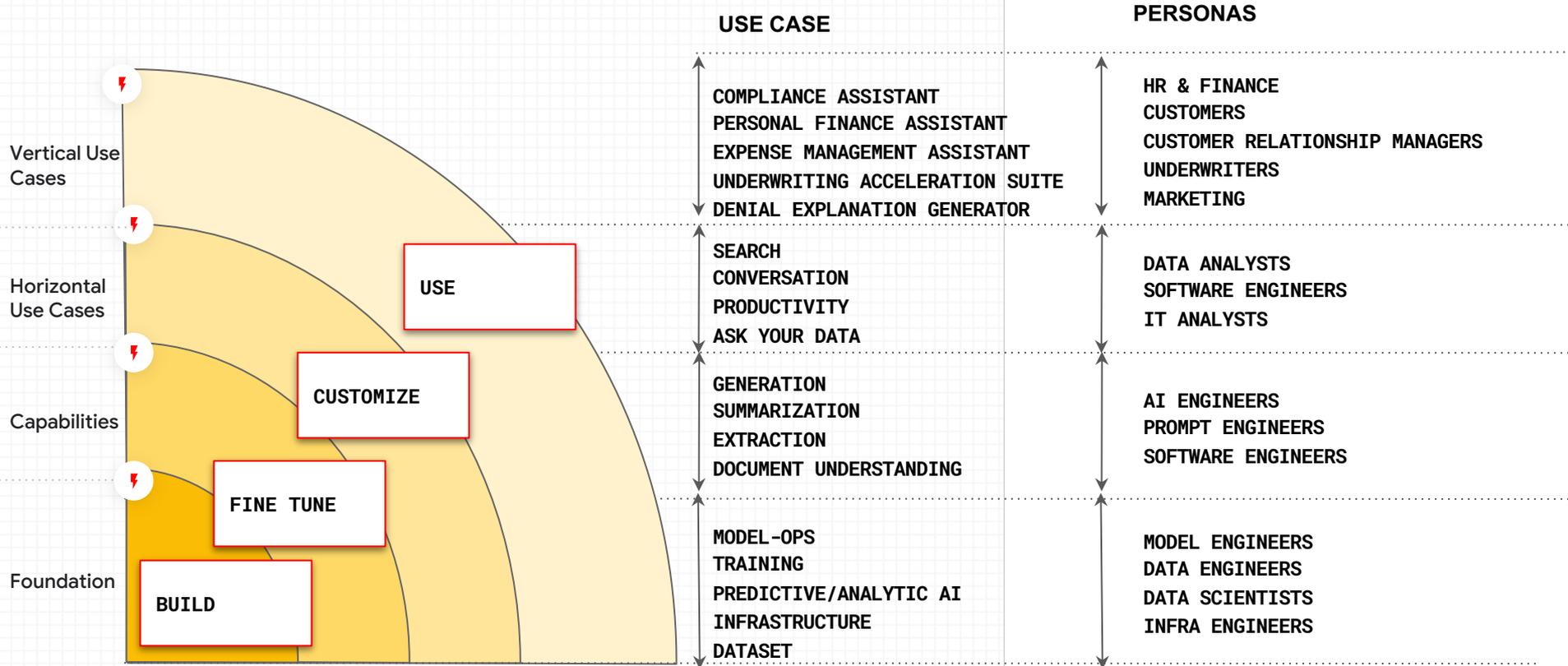
Layered Cake of AI



Layered Cake of AI



Layered Cake of AI



✦ Google AI:

**The foundation
for business reinvention**

Thank You

