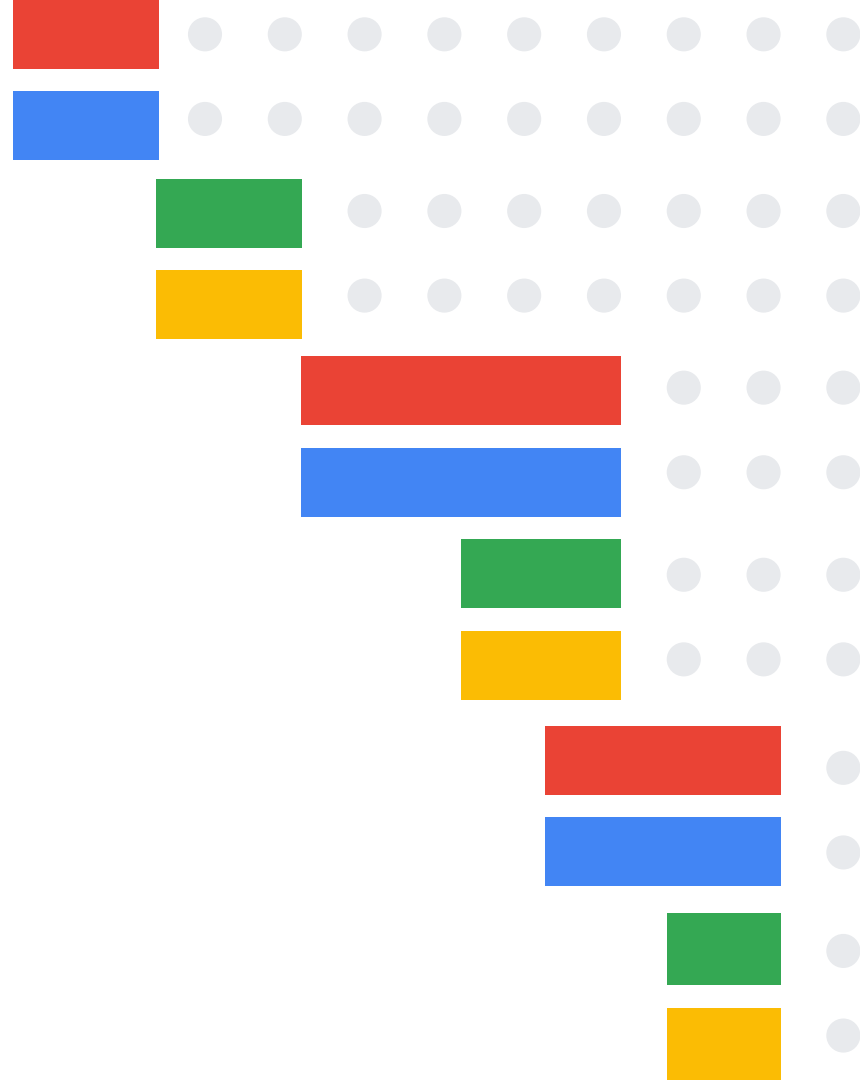


# What You Need to Know About AI



Hi, I'm Ben Royce

AI Services Manager @ [Google Cloud](#)  
and Lecturer of AI at [Columbia University](#)





It started in  
France



# Agenda

01

Intro

02

AI & GenAI

03

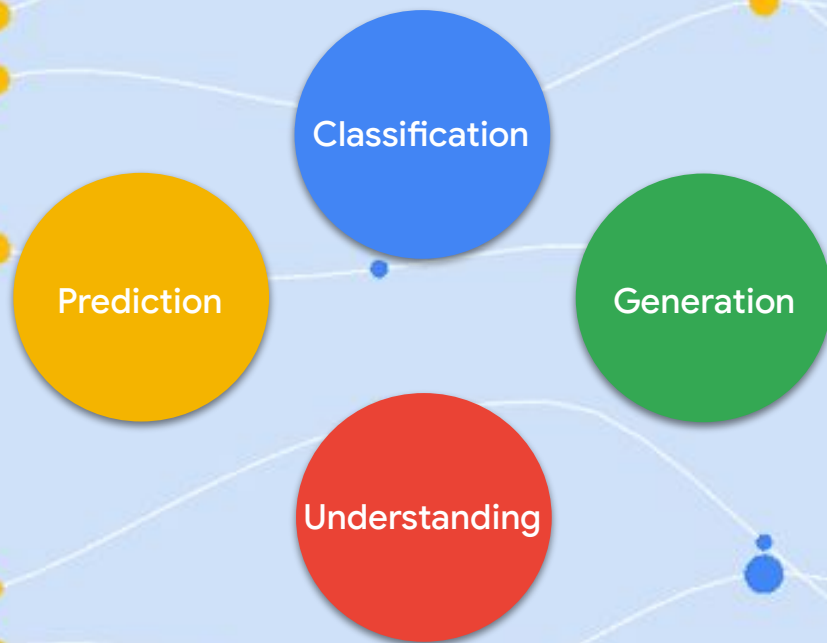
Gen AI for Accounting

04

Q&A

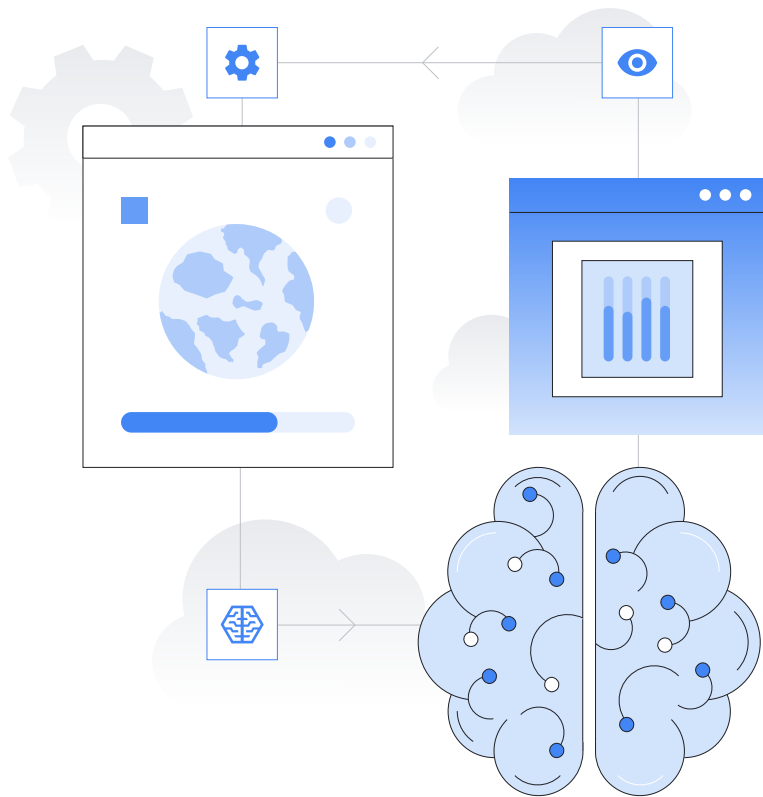


# AI is evolving from analysis to creation

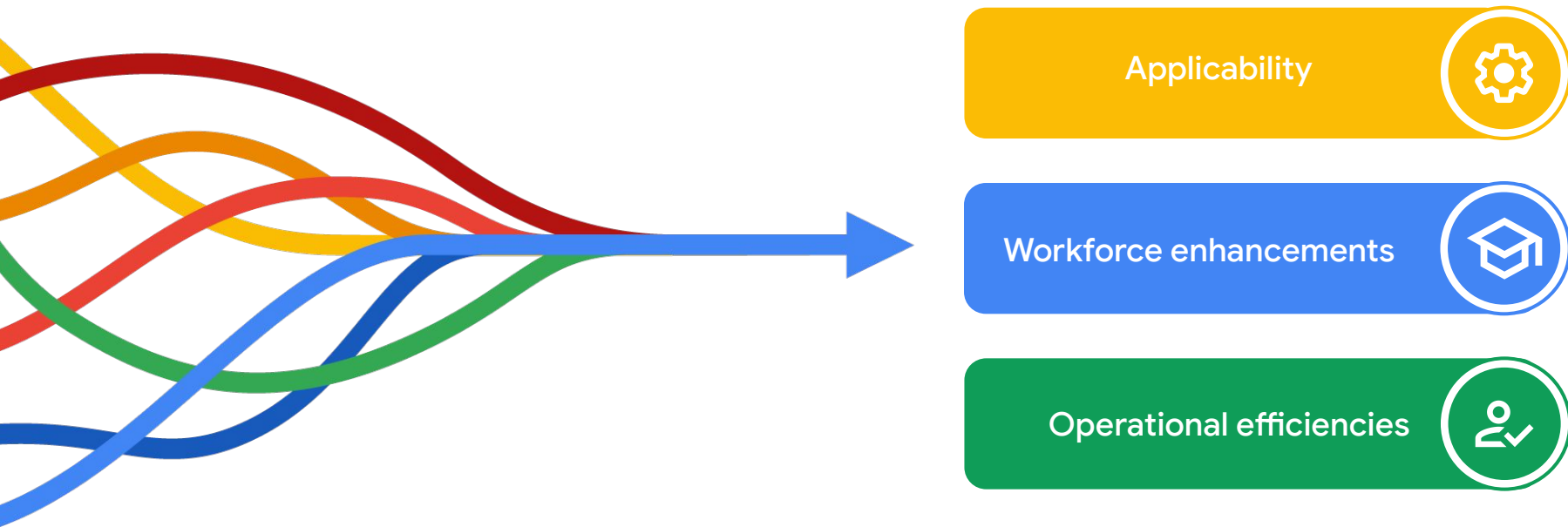


# AI is undergoing a paradigm shift with the rise of large models...

Large **foundation models** trained on broad data can be adapted to a wide range of downstream tasks **for which they have not been trained** and do reasonably well



# So why is everyone so excited?



**It's happening...**

**80%**

of employees will have the  
opportunity to use GenAI



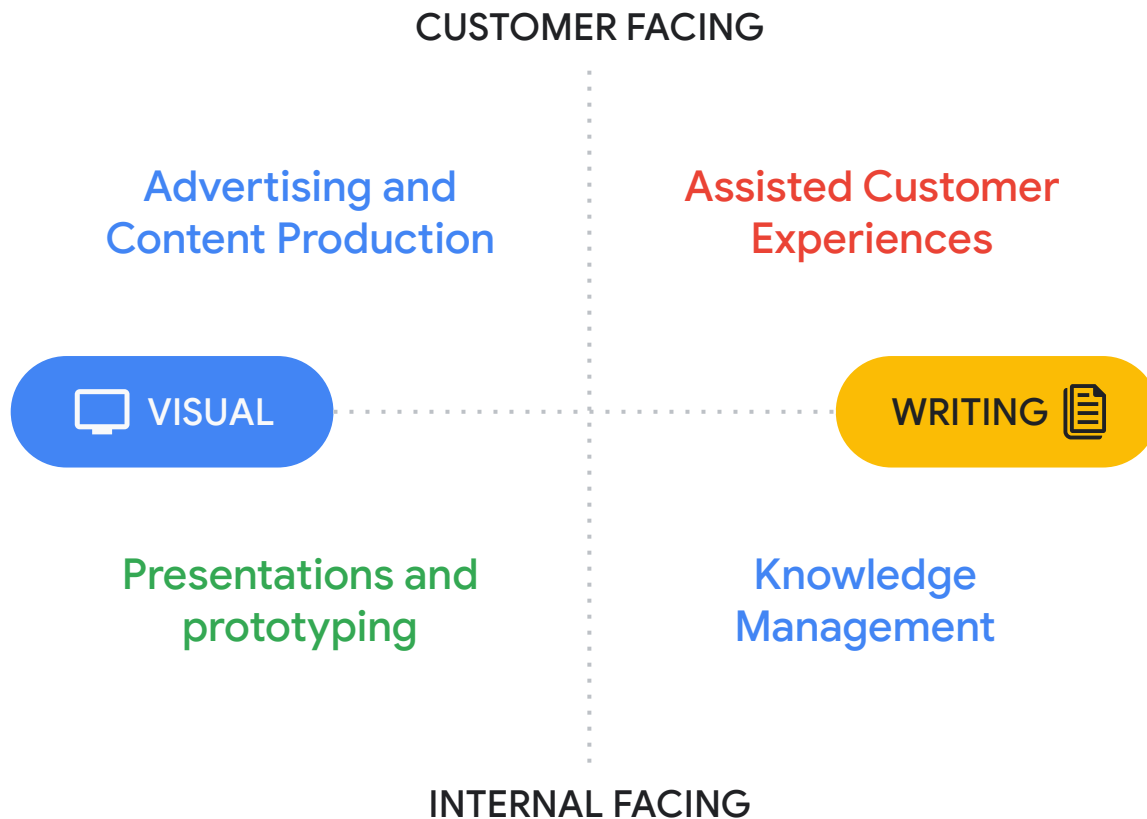
## Poll #1

Have you used a GenAI tool like ChatGPT or Bard at work?

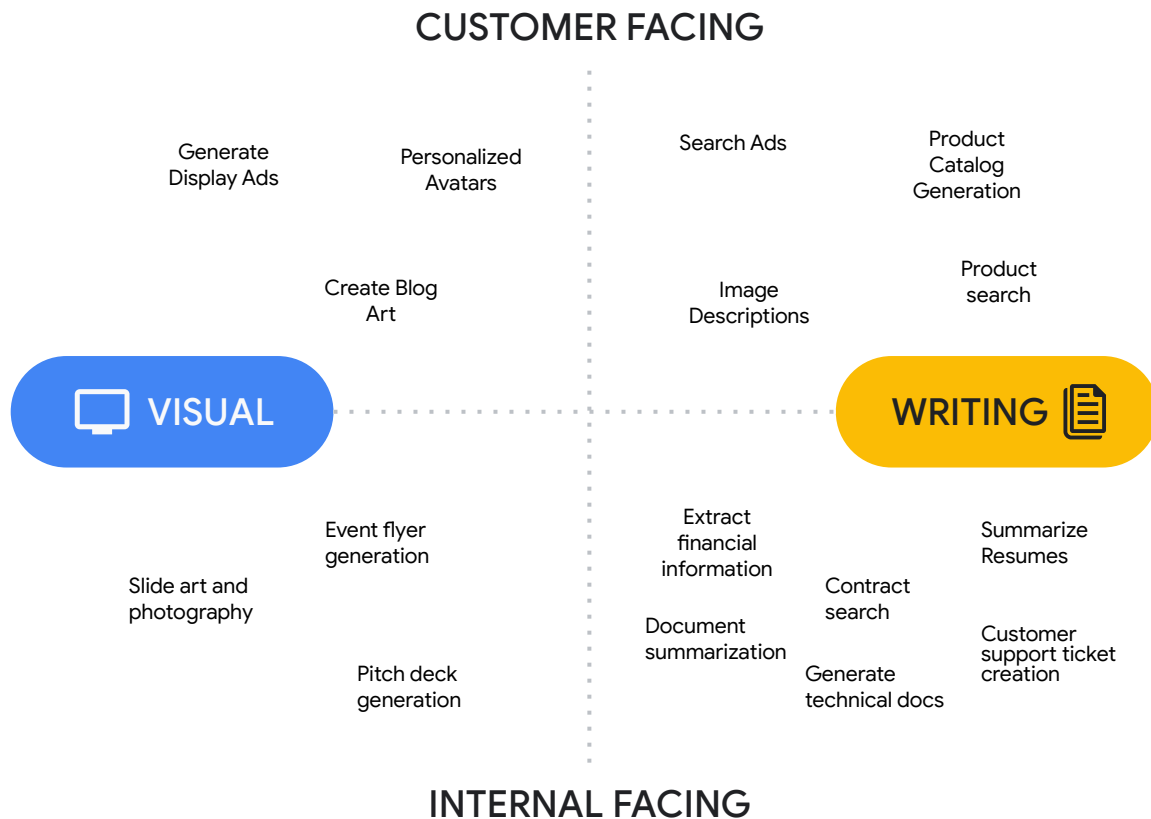
- Yes
- No
- I'm not telling

**How do I  
control  
my data?**

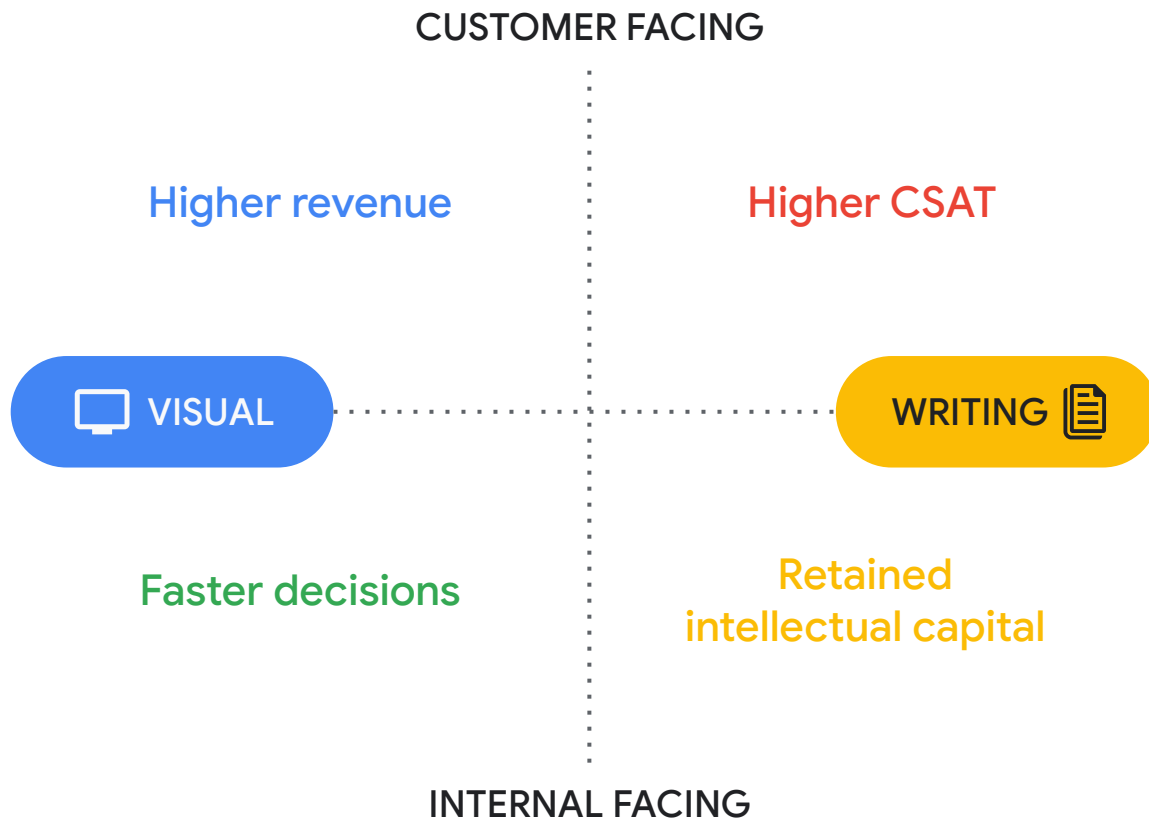
**GenAI** has many applications across the organization



**GenAI** has many applications across the organization



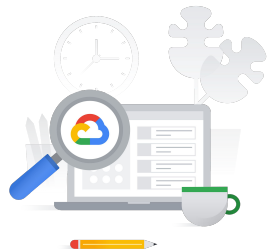
## GenAI benefits the organization





# How does it work?

# Large Language Models enable new ways to interact



Intuitive natural language experiences

## Natural Language



Search like you would on Google

## Conversational



Ask follow up questions

## Summarization with Citations



Summarization & Answers from information grounded in your data

## Multimodal



Search text, image, video using various input modes (text/image)

# Text-to-image

**Image generation** — Generate images from text descriptions or other images



A photo of a corgi riding a bike in Time Square. It is wearing sunglasses and a beach hat.

# Customer Experiences with GenAI



# On the ground effects



"Tech support agents who used AI tools that created conversational scripts **boosted their productivity by 14% on average**, but the improvement was even more pronounced for “novice and low-skilled workers” who were able to get their work **done 35% faster**."

**+14%**

Average  
Improvement in  
productivity when  
using a AI created  
conversational script

**+35%**

Faster achievement  
with “novice and  
low-skilled workers



# **Report Generation**

**Fast, dynamic  
access to valuable  
insights is  
increasingly critical  
to banks, execs,  
and finance teams**

- 01. Geopolitical Uncertainty
- 02. Climate Risk
- 03. Changing Market Conditions

Three of the top five risks that bank executives expect to most influence their industry in the coming decade.

# How can augment human intelligence and insight to drive better, faster decisions?

Financial analysts often do detailed capital markets research to identify investment opportunities and mitigate risk.

**This can often take hours or even days;** analysts must manually search across multiple internal and external data silos.





















## Capital Markets - Portfolio



File Edit View Insert Format Data Tools Extensions Help

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M43

	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					
28					
29					
30					

D	E	
Asset Allocation	<i>*Form 10-K Search*</i> What are the company's commitments to reduce greenhouse gas emissions?	
3%		
8%		
5%		
6%		
7%		
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7%		
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3%		
2%		
4%		
1%		

[Share](#)

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✎ Editing ▾



Summary



Outline

Headings you add to the document will appear here.



Help me write

Create

# AI is the ultimate research assistant across industries

## Finance



Enable quick financial data access, improve forecasting and analysis, and aid investment decisions with personalized insights.

## Science and Academia



Accelerate research with advanced data analysis and modeling, streamline literature reviews and data extraction, and facilitate experimental design.

## Healthcare



Assist drug discovery, optimize patient monitoring and diagnosis, and provide personalized treatment recommendations.

## Law and Government



Streamline legal research and analysis, aid in drafting and reviewing legal documents, and facilitate policy analysis for better governance.

## Media



Enhance content creation, support distribution and audience targeting, and provide insights on audience engagement and sentiment analysis for better content strategy.

## Education



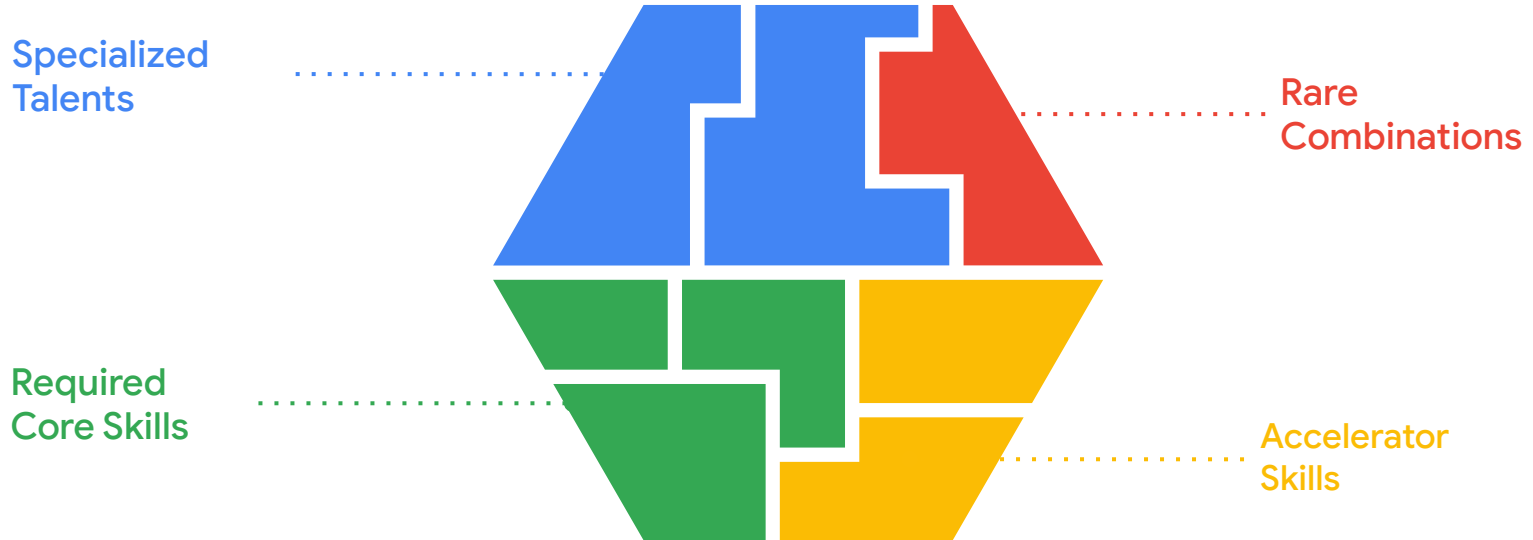
Enhance personalized learning experiences, simplify online learning and course management, and streamline administrative tasks for more efficient education delivery.

# People Analytics

With GenAI you can discover **talent** already in your organization



# HR Analytics and the Knowledge Driven Employee



# Mapping knowledge across your organization

## Self Assessment

How well do you do at project management?

1 2 3 4 5 6 7 8 9 10

Not very well at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Exceptionally well

SUBMIT

## Information seeking

Who do you go to for information about project management?

Choose

Mike

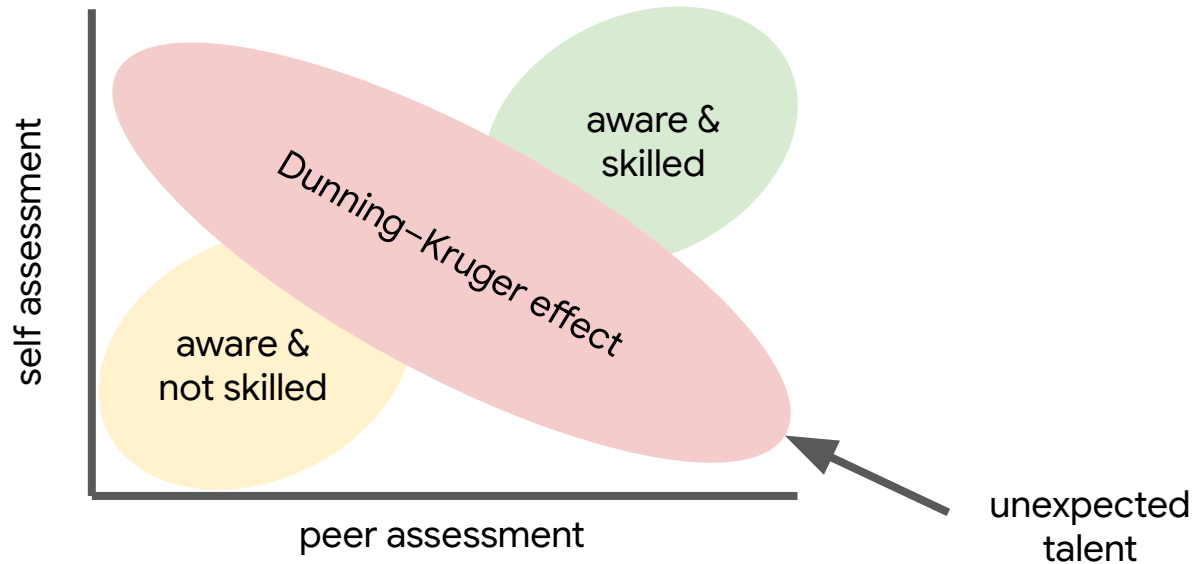
Mary

Cindy

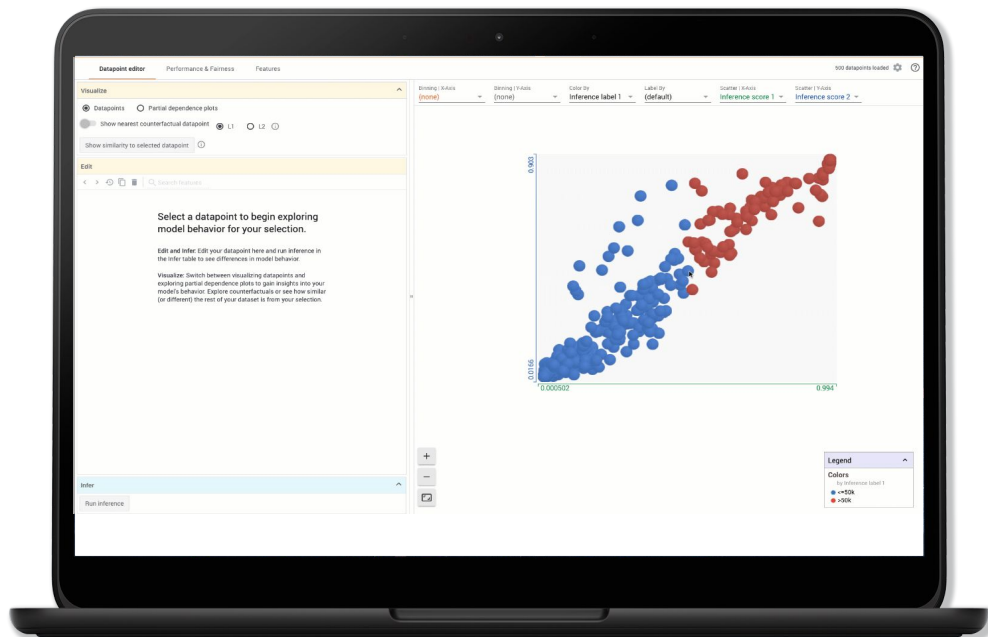
SUBMIT



# Mapping knowledge across your organization

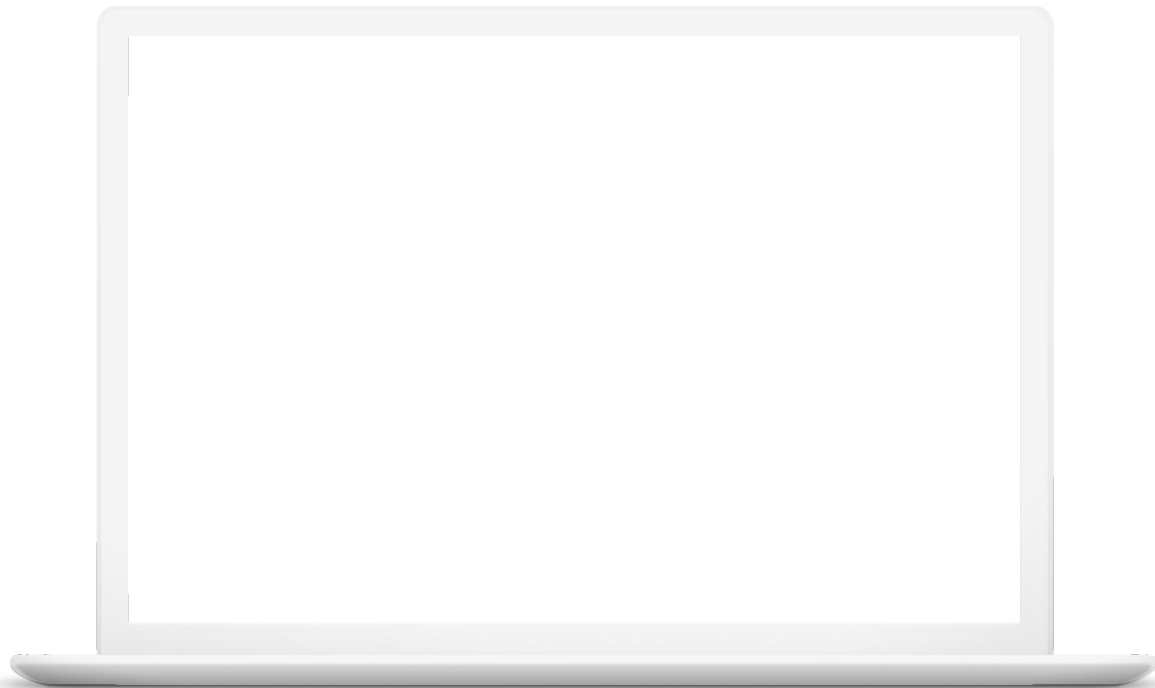


# Using Generative AI for Skillset Discovery



# Embeddings: AI Learning Language

Extract semantic information from unstructured data to **improve recommendation engines, ad targeting systems, image classification, image search, & more**



# Accounting



Coding and accounting  
have a lot in  
common



# If **Gen AI** improves productivity for engineers, it can for you too

**30%**

of developers spend 30 minutes/day searching for solutions.

**10%**

spend more than an hour searching for solutions each day.

**30%**

encounter a knowledge silo at least once a week.

Source: [Stack Overflow Developer Survey 2022](#)

---

**Remember your  
first day on the job**

---

### Poll #3

How many of you received a comprehensive guide to your job right when you started?

- Yes, I did
- No, I didn't
- My boss is sitting next to me, don't make me answer this



# Day 1 Mentality



**Organize critical information**



**Make it findable**



**Deliver it at the right time**

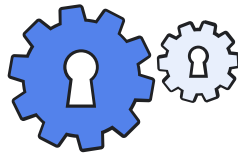


# Day 1, oh my...

- Controlled vocabularies
- Acronyms
- Codenames
- Sites
- Vendor rebrands
- Previous names



Onboarding  
should be  
**fast**, **relevant**,  
and **clear**



Explain what  
each system does



Summarize migration and  
launch policies



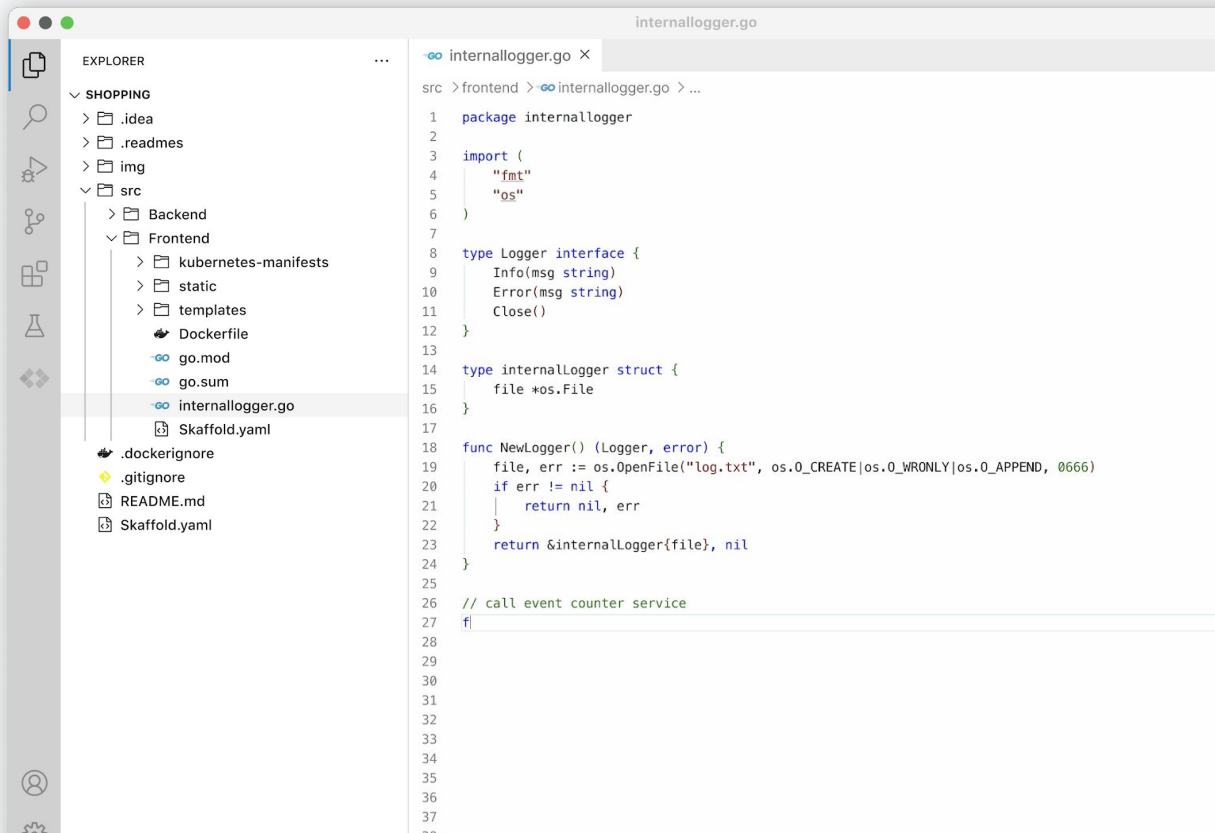
Where sensitive data resides



Compile relevant  
post mortems

# Journal Recommendations

If we can **write better code faster** we can suggest Journal entries as well



The screenshot shows an IDE window with two panes. The left pane is the 'EXPLORER' view, displaying a file tree for a project named 'SHOPPING'. The tree structure is as follows:

- SHOPPING
  - .idea
  - .readmes
  - img
  - src
    - Backend
    - Frontend
      - kubernetes-manifests
      - static
      - templates
      - Dockerfile
      - go.mod
      - go.sum
      - internallogger.go (selected)
      - Scaffold.yaml
  - .dockerignore
  - .gitignore
  - README.md
  - Scaffold.yaml

The right pane is the code editor, showing the contents of 'internallogger.go'. The code is as follows:

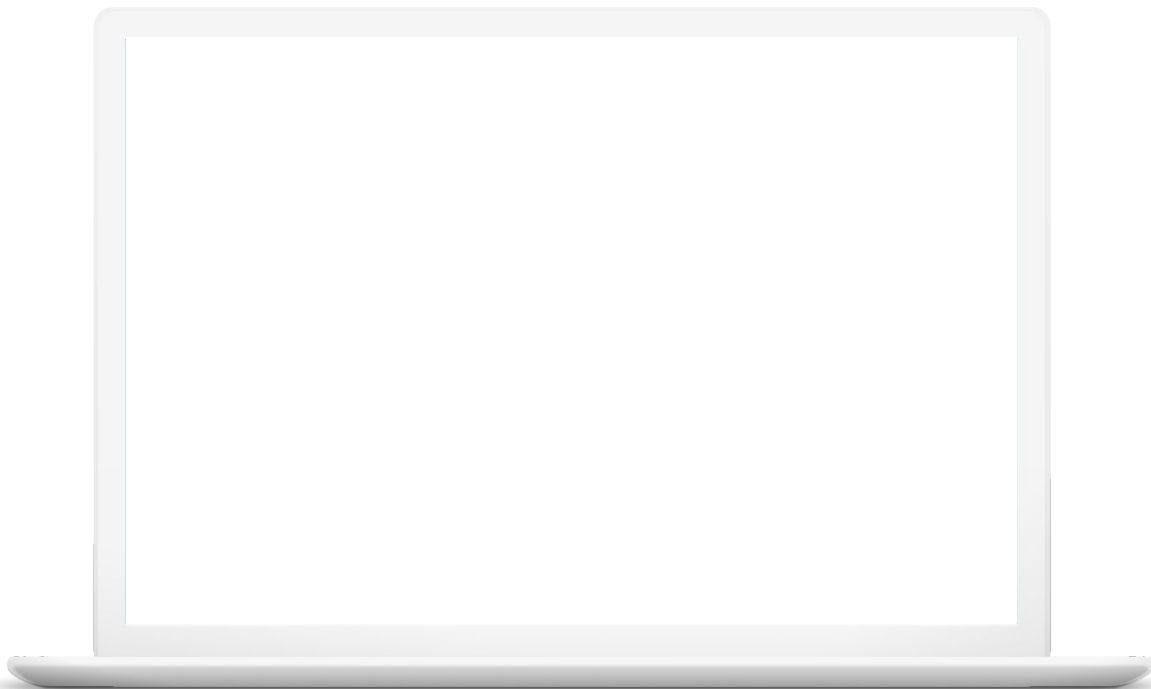
```
1 package internallogger
2
3 import (
4     "fmt"
5     "os"
6 )
7
8 type Logger interface {
9     Info(msg string)
10    Error(msg string)
11    Close()
12 }
13
14 type internalLogger struct {
15     file *os.File
16 }
17
18 func NewLogger() (Logger, error) {
19     file, err := os.OpenFile("log.txt", os.O_CREATE|os.O_WRONLY|os.O_APPEND, 0666)
20     if err != nil {
21         return nil, err
22     }
23     return &internalLogger{file}, nil
24 }
25
26 // call event counter service
27 f
```



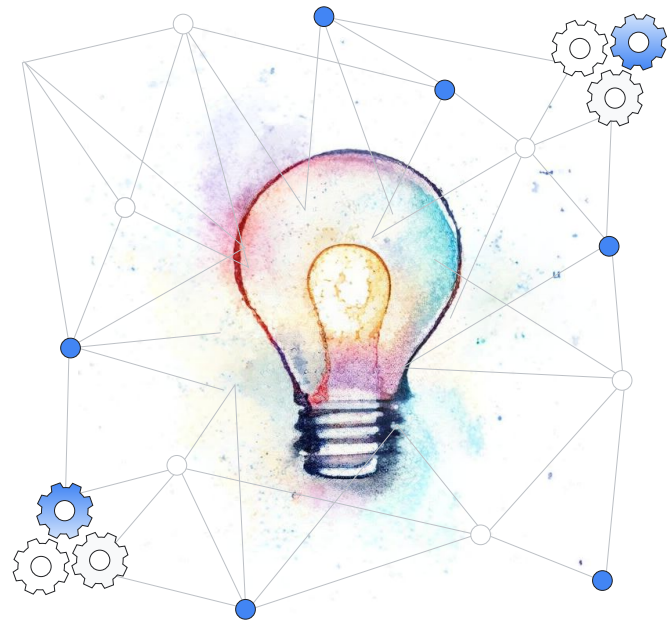
## Safely Getting Smarter:

# Reinforcement Learning from Human Feedback (RLHF)

Fine tune your pre-trained large language models and incorporate human feedback to increase **the model's usefulness and accuracy.**



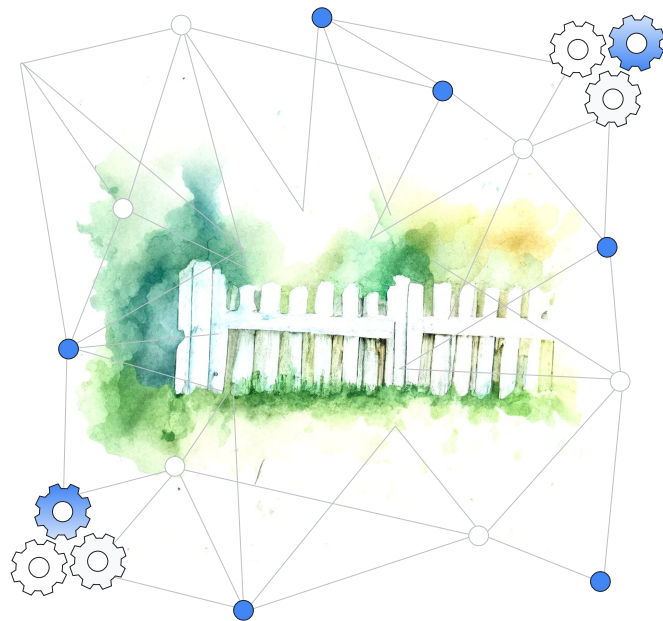
# What I **Wish** I Knew Earlier



# Large foundation models are **free**



Data **security**  
matters even more

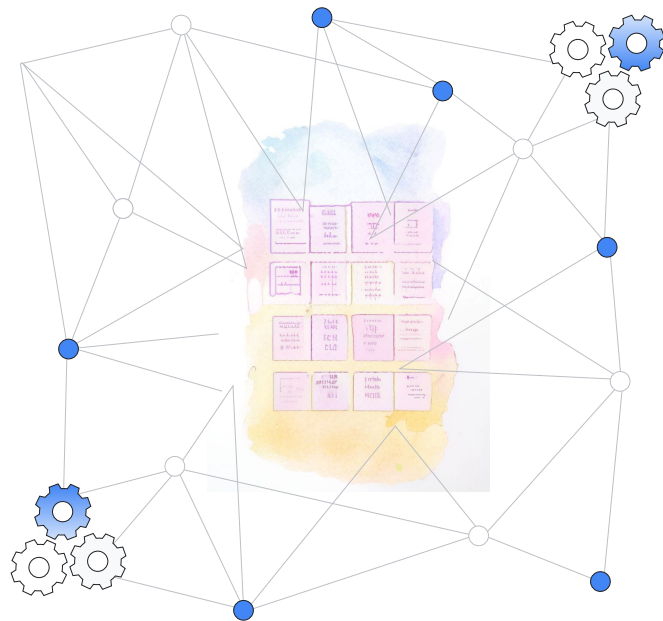




**Explainability** is also  
business insight



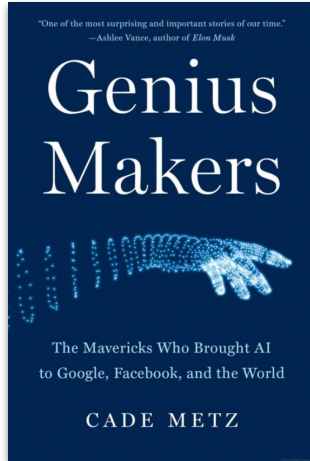
# Responsible AI is a feature



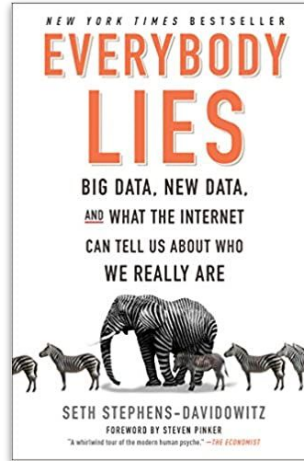
# Adjust models for your use case



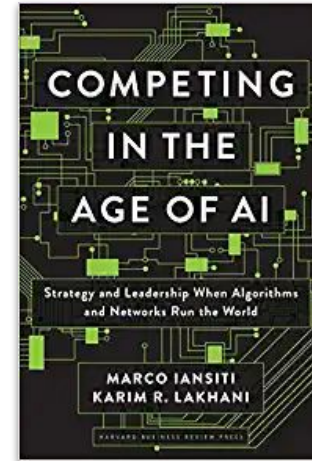
# Extra Credit



Genius Makers  
by Cade Metz



Everybody Lies by Seth  
Stephens-Davidowitz



Competing in the Age of AI  
by Marco Iansiti and  
Karim R Lakhani



# QUESTION

**What 3 words said by an executive  
were associated with 6 month stock decline?**

## Poll #4

What 3 words said by an executive were associated with 6 month stock decline?

- [open text field]



**Seeking**

**I haven't  
found it**

**Strategic**

**I am trying to  
sound smart**

**Alternatives**

**Whatever I'm  
doing now isn't  
working**

**Questions,  
comments,  
scathing rebuttal?**

**Oh, and one last thing...**



**Questions,  
comments,  
scathing rebuttal?**



**kthxbye**