





README

I'm making this summary deck available because we need to do serious long-term planning, and it's just not happening. My hope is that you'll use this deck as a conversation starter and to strengthen your strategic foresight positioning within your organization or to start a foresight team. —Amy Webb

USING AND SHARING THE MATERIAL IN THIS DECK

You are free to:

Download the materials for your or your organization's non-commercial use.

Use the assets with full attribution to Future Today Institute using the following language: "This material is copyrighted by Future Today Institute and licensed under the Creative Commons 4.0 International License (CC BY-NC-ND 4.0)."

Use assets in a reasonable manner, but not in any way that suggests that Future Today Institute endorses you or your use.

You may not:

Use the materials for any commercial purposes, which includes: selling, licensing or charging for products or services that use the materials.

Publish the materials in a book or upload to a website or intranet without prior written permission from Future Today Institute.

Remix, transform or build upon the material without giving appropriate credit to Future Today Institute as the originator of the work using the following language: "This material is adapted from original work copyrighted by Future Today Institute and licensed under the Creative Commons 4.0 International License (CC BY-NC-ND 4.0)."

Assert a relationship with or endorsement from Future Today Institute.





THANK YOU
SXSW

3 THINGS ABOUT ME

1. **Quantitative Futurist & CEO of Future Today Institute**
2. **Professor of Strategic Foresight at NYU**
3. **Collaborator on Films & Shows**





**What is INFLUENCING
the Future?**



What are THE Futures?



**What is YOUR ORG's
Future?**



SIGNALS & LONG-TERM TRENDS

What is
INFLUENCING
the future?



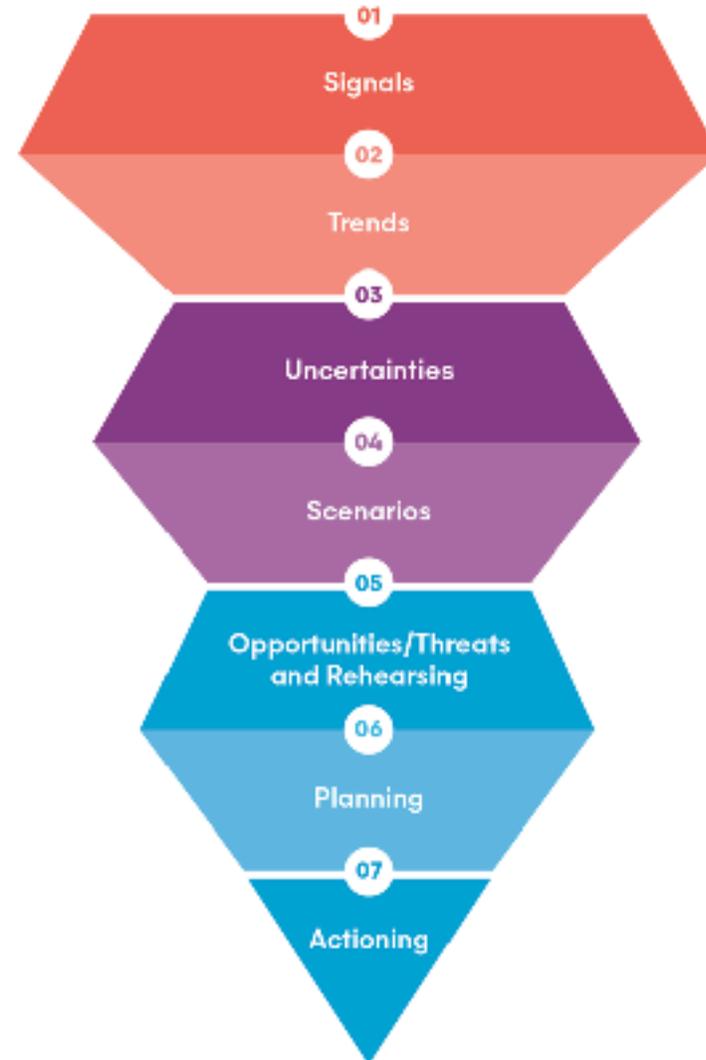
GLOBAL MACRO SCENARIOS

What is
THE future?



STRATEGIC

What is
YOUR ORG'S
future?



3 THINGS ABOUT YOU

1. **You are futurists!**
2. **You are going to need a strong stomach**
3. **You'll leave with a personal plan for the futures.**

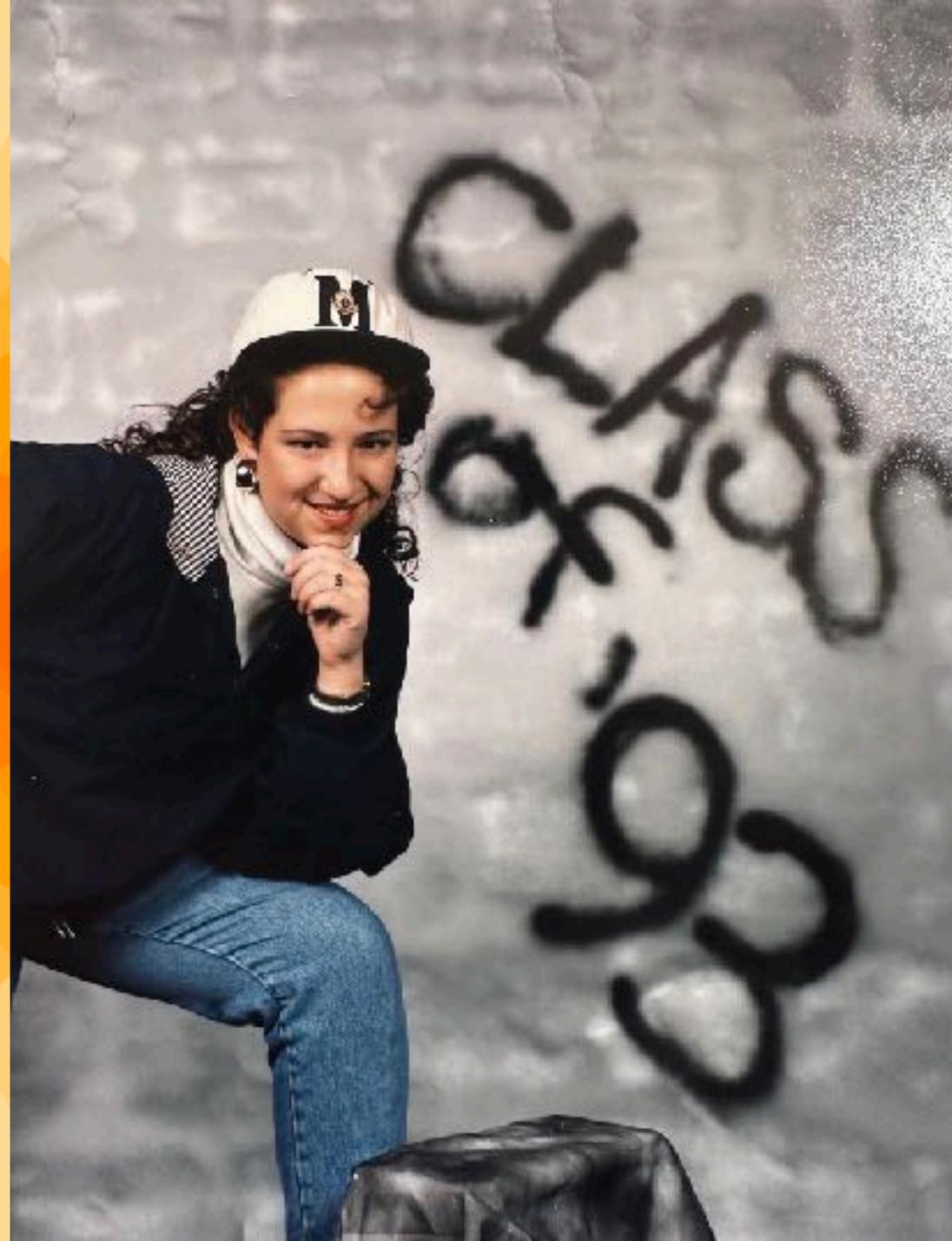




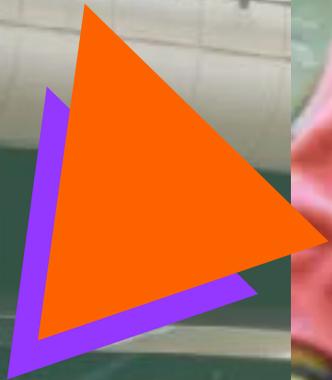
Before we get started on trends...



1990S



The Mall



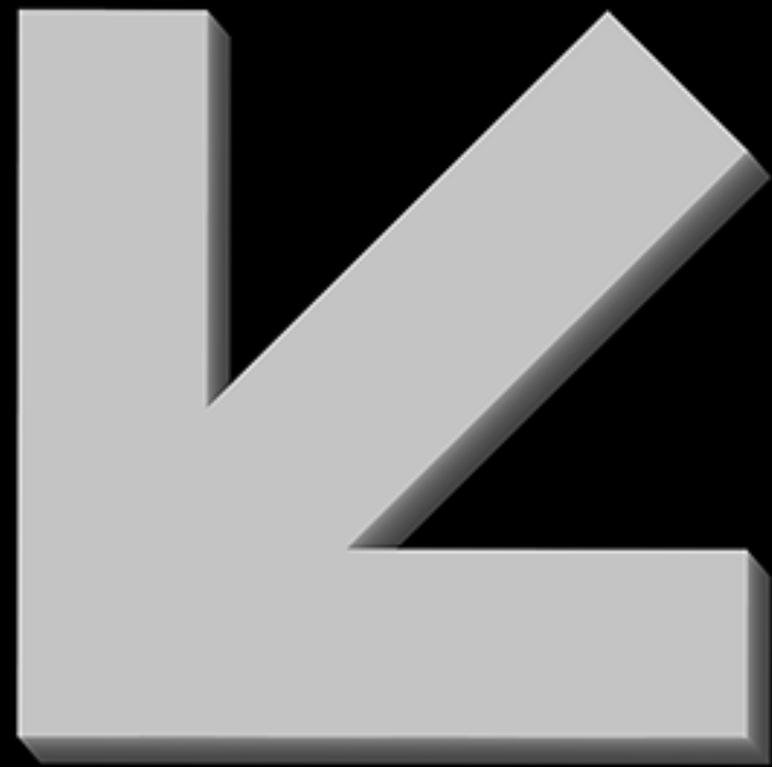
MAGIC EYE

A New Way of Looking at the World



3D Illusions by N.E. Thing Enterprises





SXSW[®]

2023

Autostereogram

- Invented in 1979
- Apple II & BASIC
- Random “noise”
- See a 3D shape in single 2D image
- 1991 color added

**OUR WORLD
LOOKS LIKE
MAGIC EYE
ART**





**Signals are mixing in
a way I haven't seen
before.**

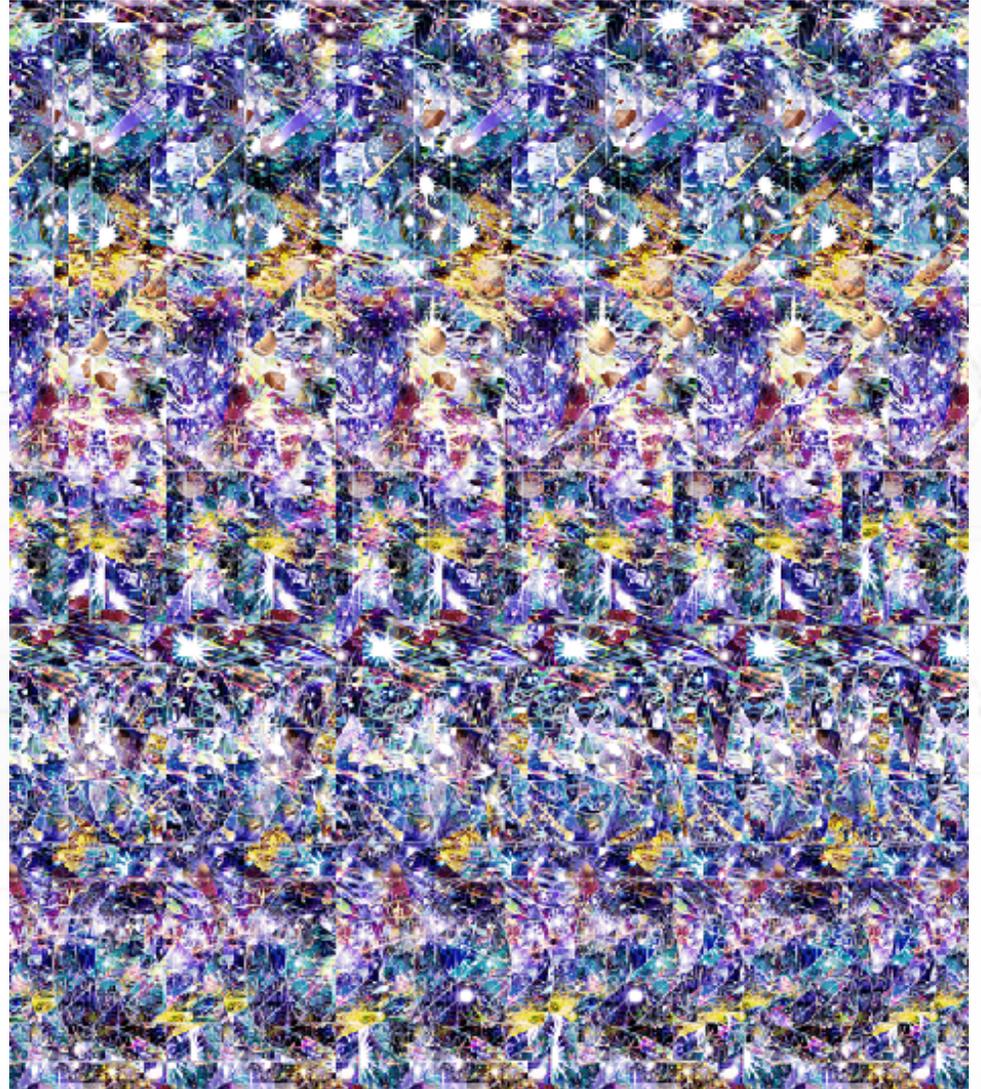


**Leaders are
focused too
narrowly on
the future**





**In 2-D your
eyes interpret
the image as
chaos.**



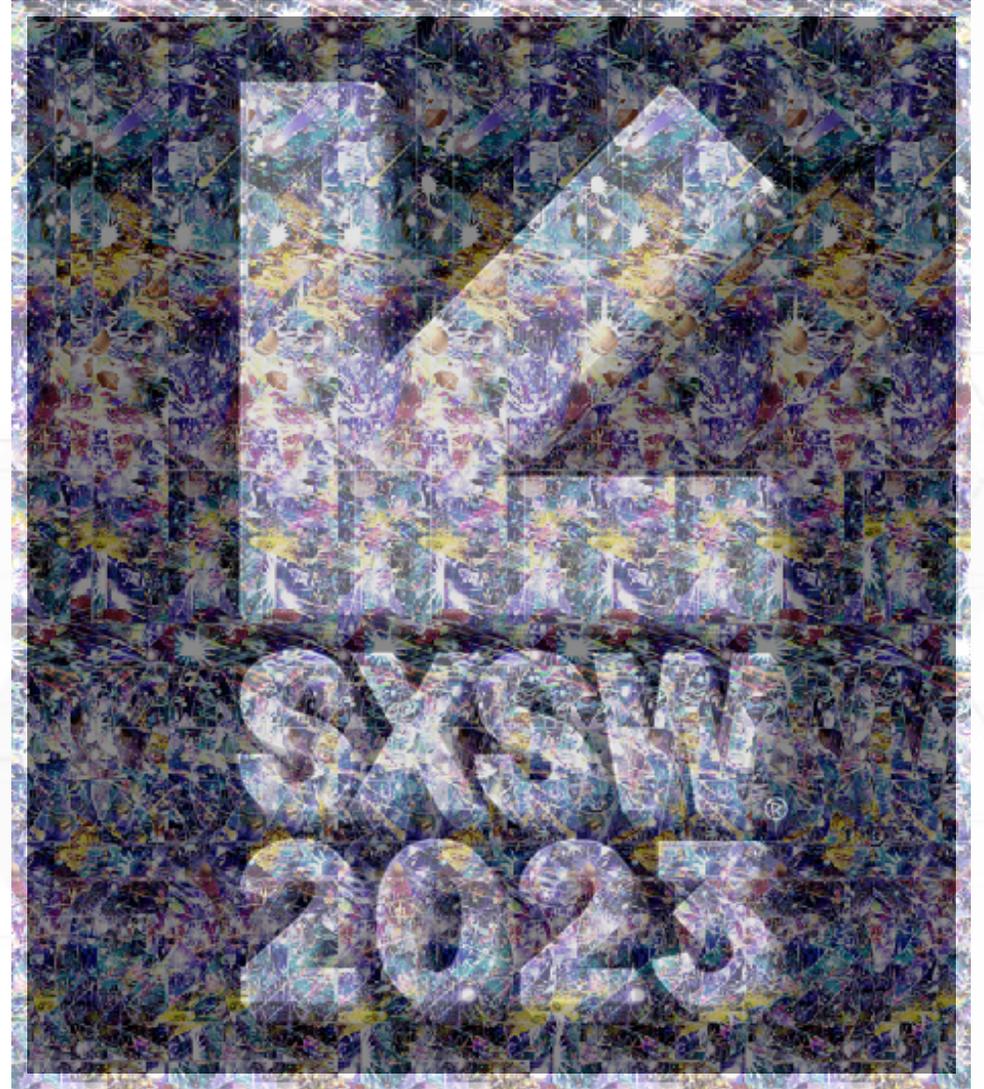


**Focus
attention
correctly to see
what matters**





**Your eyes find
new patterns
by tracking
convergences**

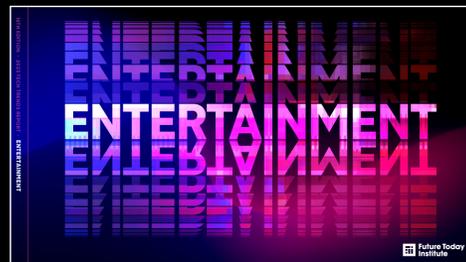
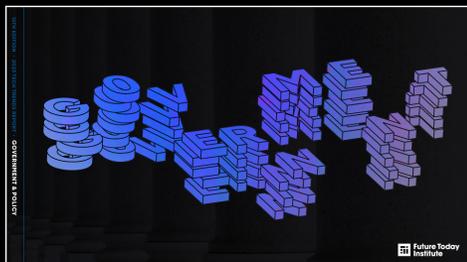
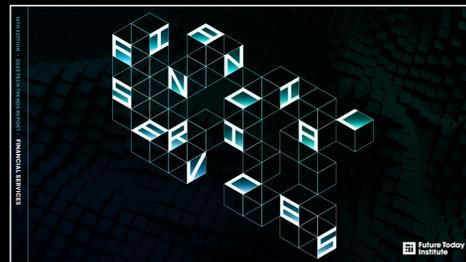
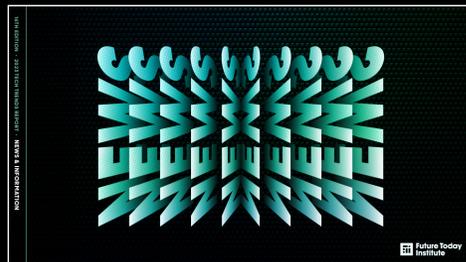
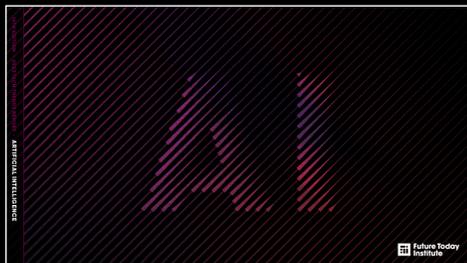




FOCUS IS THE THEME FOR OUR 2023 TREND REPORT



FUTURE TODAY INSTITUTE'S 2023 TECH TREND REPORT



Future Today Institute



BY THE NUMBERS

666

TRENDS

PROJECTING

~1.2

MILLION
DOWNLOADS
THIS YEAR

15

SECTIONS

819

PAGES

16TH

ANNIVERSARY

IMPACT OF TRENDS ON YOUR INDUSTRY

Near-Term Relevance █ █ █ █ █ Long-Term Relevance

	AI	Generative AI	Climate and Green Tech	Mobility	AR/VR/XR and Synthetic Media	Robots and Drones	Web3 Infrastructure	Bioengineering	Metaverse	Quantum
Agriculture	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Long-Term
Automotive	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term	Long-Term	Long-Term
Aviation and Travel	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term	Long-Term	Long-Term
Construction, Engineering	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Near-Term	Long-Term
Consumer Packaged Goods	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Long-Term
Education	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term	Long-Term	Long-Term
Financial Services	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Near-Term	Near-Term	Near-Term
Government and Policy	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term
Health Care Systems and Services	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term
Hospitality	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term	Long-Term	Long-Term
Media (Entertainment)	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term
Media (News)	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Near-Term	Long-Term
Pharmaceutical and Medical Products	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Long-Term
Public and Social Sectors	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term
Real Estate	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Long-Term	Long-Term	Long-Term
Restaurants	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Near-Term	Long-Term	Long-Term
Retail	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term
Space and Aerospace Defense	Near-Term	Long-Term	Near-Term	Long-Term	Near-Term	Near-Term	Long-Term	Near-Term	Long-Term	Long-Term
Supply Chain and Logistics	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term
Telecommunications	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Near-Term	Long-Term	Near-Term	Near-Term

OUR PLAN

- 1. Theme is focus**
- 2. Show you 35 trends**
- 3. Ask “What if” scenarios**



**We cannot be trend
spectators this year**



**Inspired by Magic Eye
art, we're going to
make this session 3-D**



Tool called...



ACT

Risk Without Action!

- Previously unseen immediate benefit to our org
- Inflection point is imminent
- Impacts our financial projections

DECIDE

Near-Term Opportunity or Risk

- Could disrupt our business
- Near-term market or operational risk
- Meaningful impact on our brand positioning

MONITOR

Long-Term Opportunity or Risk

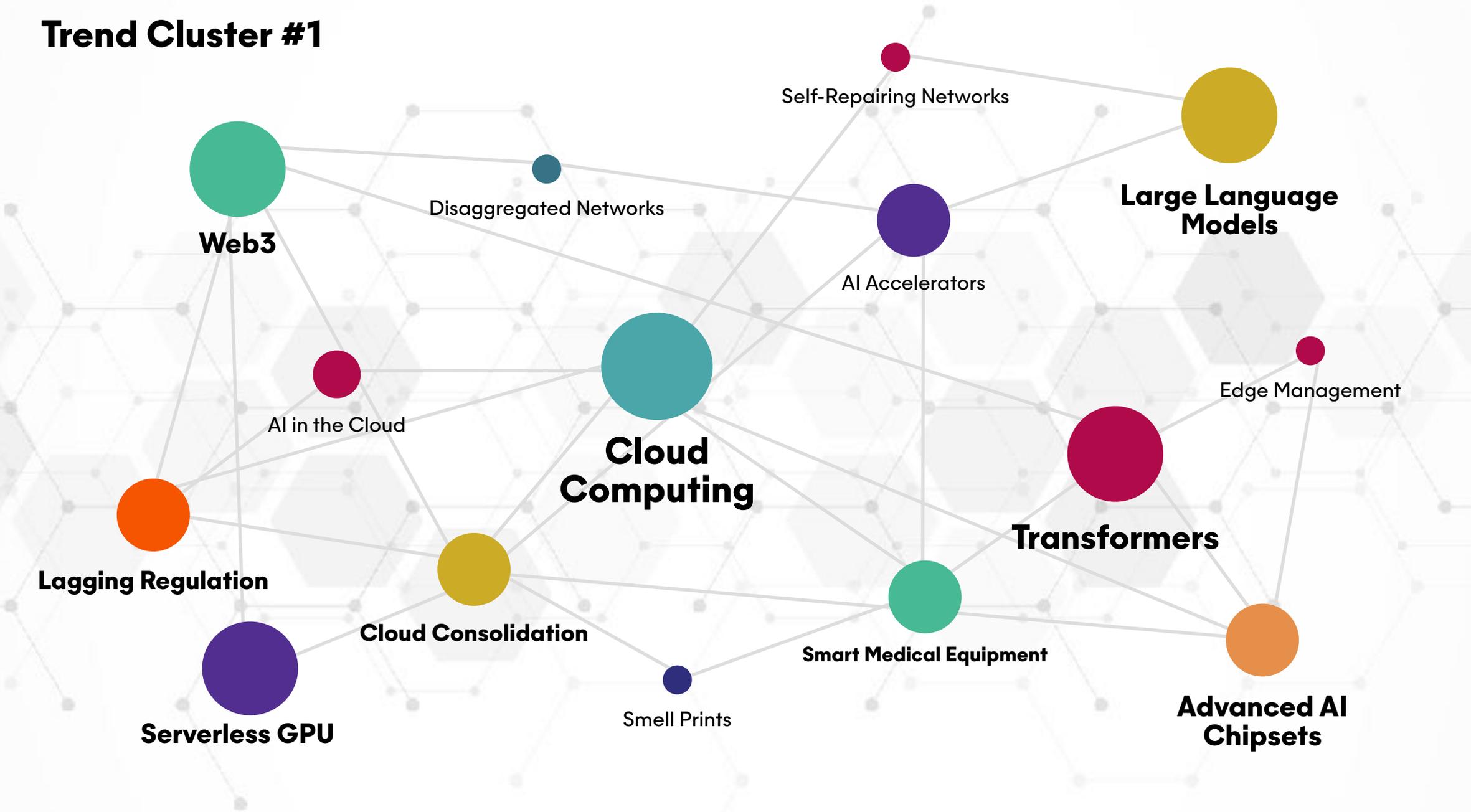
- Knock-on effects could shape our industry or business
- Could pose novel security risk
- Could create new demand for our product/ services

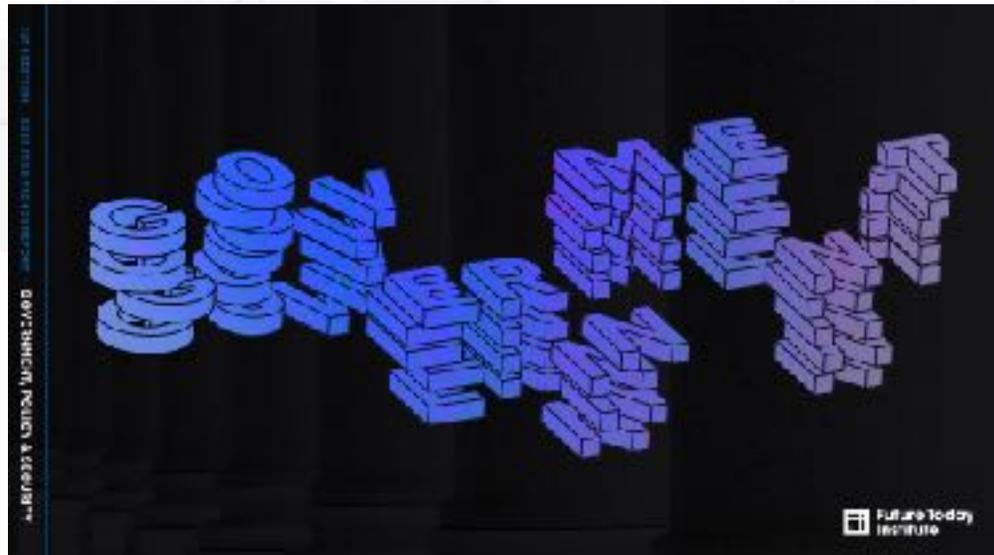


TREND CLUSTER #1



Trend Cluster #1







KEY INSIGHT

**It's the end of the internet
as you know it.**



IMPLICATION

Everything is information.



WHAT WE THINK THE INTERNET IS

**Global network of
billions of computers
and electronic devices.**

**It facilitates the spread
of digital information.**



Internet Explorer browser window showing a MySpace profile for Tom. The profile includes a photo, bio (Male, 30 years old, Santa Monica, CA), and a list of songs. An iTunes window is overlaid on the profile, displaying a playlist of songs by The White Stripes.

Tom's Profile:

- Male, 30 years old, Santa Monica, CA, United States
- Last Login: 2/18/2003
- MySpace URL: https://myspace.windows93.net/1
- Songs I want: I Do, I Do (I Love You)

iTunes Playlist:

Song	Time	Artist
Blue Orchid	2:37	The White Stripes
The Nurse	3:17	The White Stripes
My Darling	4:01	The White Stripes
Forever For Her (It's Over For Me)	3:13	The White Stripes
Little Ghost	2:18	The White Stripes
The Dental Toler	2:35	The White Stripes
White Moon	4:01	The White Stripes
In-Just Blues	4:16	The White Stripes
Passive Manipulation	0:35	The White Stripes
Ice, Ice, Ice	4:22	The White Stripes
As Ugly As I Feel	4:09	The White Stripes
Red Rain	3:52	The White Stripes
I'm Lonely (& I Ain't That Lon...)	4:19	The White Stripes

13 songs - 44:07 total time, 104:00

Internet Explorer browser window showing the eBay homepage. The page features the eBay logo, navigation links, a search bar, and various promotional banners and category listings.

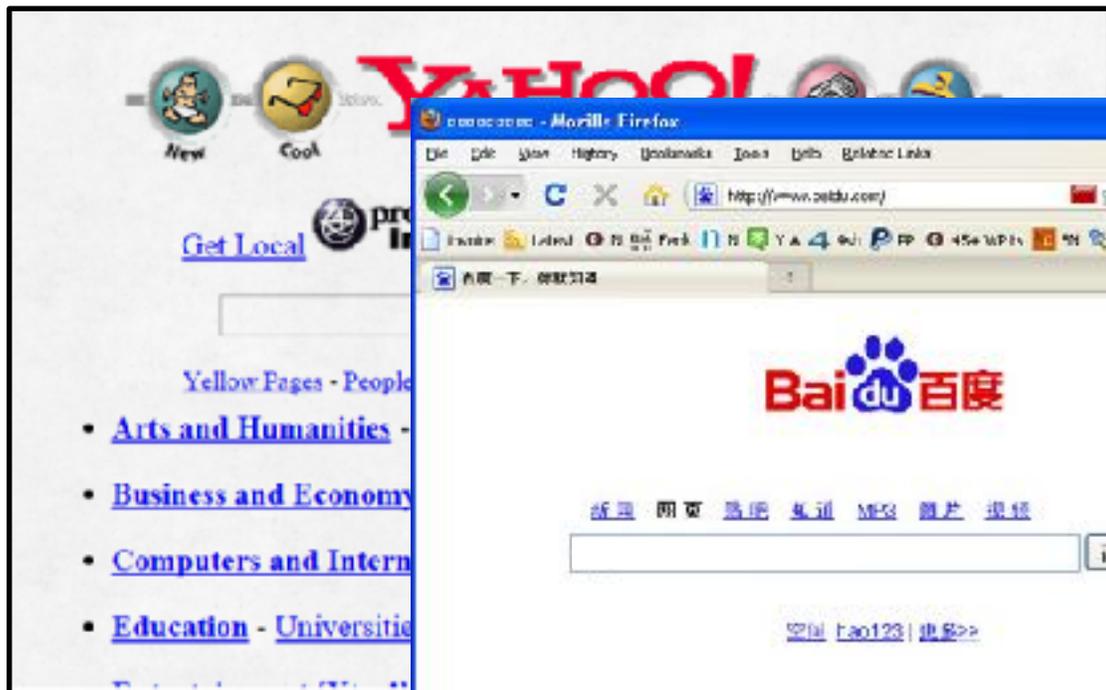
eBay Home Page:

- Navigation: Browse, Sell, Services, Search, Help, Community
- Search: your personal trading community™
- Categories: Automobiles, Antiques, Books, Movies, Music, Coins & Stamps, Collectibles, Computers, Dolls, Figurines, Jewelry, Gemstones, Photo & Electronics, Pottery & Glass, Sports Memorabilia, Toys, Bean Bag Cushions, Miscellaneous
- Featured: Canon (by 2000-0000-0000 Series Color 1.9), Dell (by 2000-0000-0000 Series Silver Good), IBM (by 2000-0000-0000 Series Disk Drive 2.0), Microsoft (by 2000-0000-0000 Series Keyboard), Canon (by 2000-0000-0000 Series Color Camcorder)
- Stats: 2,947,827 items for sale in 2,078 categories now! Over 1.5 billion page views per month!
- Logos: AOL All New Click Here! 4.0, Kodak PrintShare, Amazon.com, Visa, eBay Visa, Apply now!
- Footer: Copyright © 1995-1999 eBay Inc. All Rights Reserved. Use of this Web site constitutes acceptance of the eBay User Agreement and Privacy Policy.



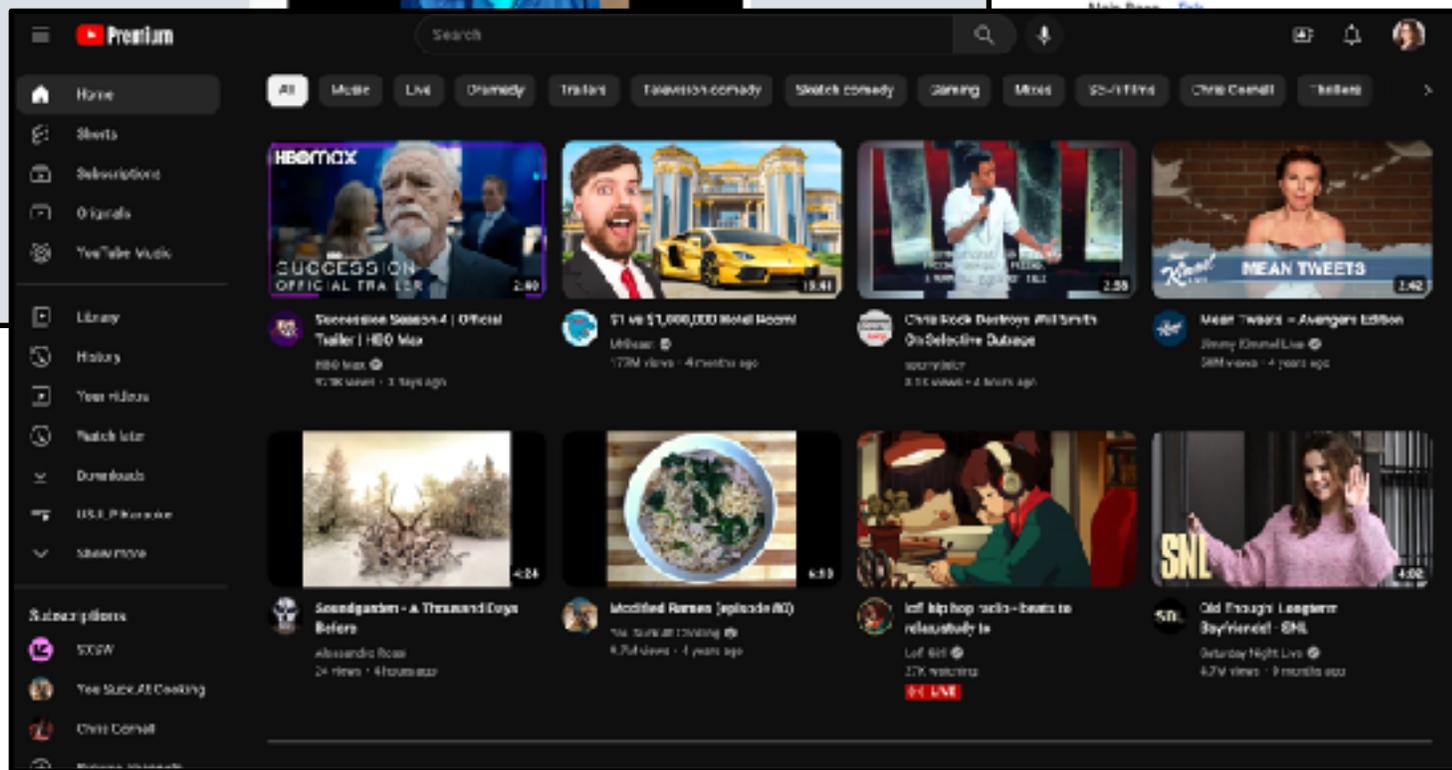
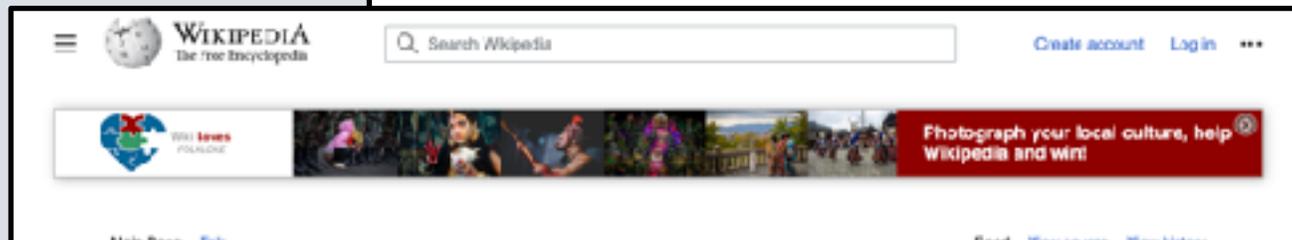
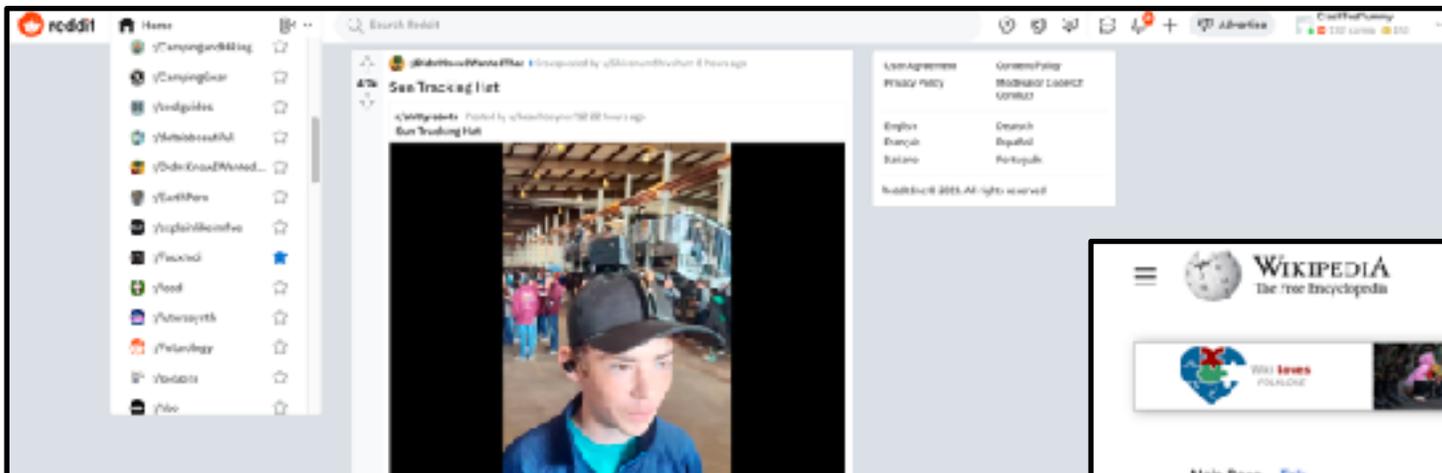
METADATA

**Information ABOUT
all that information –
and how you
interacted with it –
became a valuable,
monetizable resource.**





**Even MORE information
and MORE metadata got
created as the internet
evolved.**





Creator



What if the internet is morphing into something different?



WHAT IF

You don't search the internet...

because the internet searches you?



Convergences





**We need to talk about
some developments in
code, cloud and hardware.**



**Google researchers
published this
paper in 2017.**

**Introduced the
concept of...**

arXiv:1706.03762v5 [cs.CL] 6 Dec 2017

Attention Is All You Need

Ashish Vaswani*
Google Brain
avaswani@google.com

Noam Shazeer*
Google Brain
nshazeer@google.com

Niki Parmar*
Google Research
nikip@google.com

Jakob Uszkoreit*
Google Research
usz@google.com

Llion Jones*
Google Research
llionj@google.com

Aidan N. Gomez*[†]
University of Toronto
aidan@cs.toronto.edu

Lukas Kaiser*
Google Brain
lukaszkaiser@google.com

Illia Polosukhin*[‡]
illia.polosukhin@gmail.com

Abstract

The dominant sequence transduction models are based on complex recurrent or convolutional neural networks that include an encoder and a decoder. The best performing models also connect the encoder and decoder through an attention mechanism. We propose a new simple network architecture, the Transformer, based solely on attention mechanisms, dispensing with recurrence and convolutions entirely. Experiments on two machine translation tasks show these models to be superior in quality while being more parallelizable and requiring significantly less time to train. Our model achieves 28.4 BLEU on the WMT 2014 English-to-German translation task, improving over the existing best results, including ensembles, by over 2 BLEU. On the WMT 2014 English-to-French translation task, our model establishes a new single-model state-of-the-art BLEU score of 41.3 after training for 3.5 days on eight GPUs, a small fraction of the training costs of the best models from the literature. We show that the Transformer generalizes well to other tasks by applying it successfully to English constituency parsing both with large and limited training data.

1 Introduction

Recurrent neural networks, long short-term memory [13] and gated recurrent [7] neural networks in particular, have been firmly established as state-of-the-art approaches in sequence modeling and



TRANSFORMER

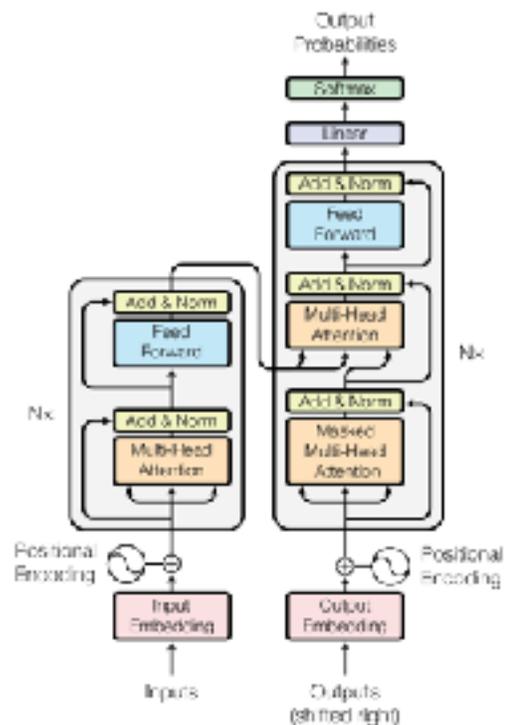


Figure 1: The Transformer - model architecture.

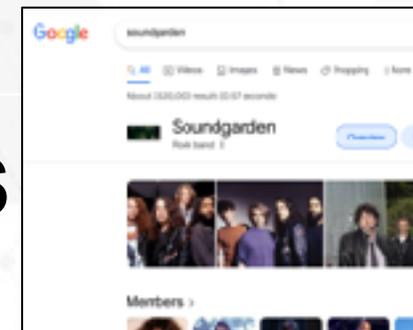


This changes our relationship to information



Search v1 — blue hyperlinks

Search v2 — knowledge graphs



Search v3 — continuous info transfer



LARGE LANGUAGE MODELS

**AI tools that
ingest and
generate
information**



**Learn a library of text
(corpus) and predict words
or sequences with
probabilistic distributions.**



GPT-1 trained on BookCorpus

**GPT-2 trained on millions of
web pages**



Research ▾ Product ▾ Safety Company ▾

Search

Ben Barry

We've trained a large-scale unsupervised language model which generates coherent paragraphs of text, achieves

“too dangerous to release”

answering, and summarization — all without task-specific training.

“safety and security concerns”

Our model, called GPT-2 (a successor to [GPT](#)), was trained simply to predict



RHLF IS GOOD IN THEORY...

...to fine tune LLMs and align them with human values.

But WHICH HUMANS are ranking outputs? Do they represent a wide range of diverse backgrounds and worldviews?

AI MODELS

Modalities—Text

PaLM

The world's largest dense LLM developed by Google, at 540 billion parameters. PaLM shows breakthrough capabilities on numerous, very difficult tasks. PaLM is the largest single LLM trained on TPUs (Tensor Processing Units) at scale, with 6144 TPU chips.

BLOOM

A collection of open-source models, built through a community effort led by HuggingFace, with the largest model at 176 billion parameters. It can output coherent text in 46 languages and 13 programming languages that is hardly distinguishable from text written by humans.

Chinchilla

A 70 billion parameter model developed by DeepMind trained on 1.4 trillion tokens proved that current LLMs are largely undertrained. This model outperformed larger models with up to 530 billion parameters. The find-

ings illustrate that for compute-optimal training, the model size and the number of training tokens should be scaled equally. The findings underscored the need for large, high-quality training data sets.

RETRO

Retrieval Enhanced Transformers, developed in February 2022 by DeepMind. Traditionally, the knowledge base of transformer models consists of only the data it was trained on. RETRO addresses this problem by obtaining a new knowledge base of "facts" through retrieving information from a database. RETRO helps LLMs stay current, without the need for retraining models. By decoupling the knowledge base from the model, researchers show that RETRO models with ~25x fewer parameters can achieve similar results to that of larger models.

GPT-3.5

The new and improved version of OpenAI's original 175 billion param-

eter GPT-3 model. This model was trained on more recent data with the new reinforcement learning with human feedback, a technique that used human and machine written data to improve the original GPT-3 model. This model is consumer focused, and is the backbone of ChatGPT. These sets of techniques are also commonly referred to as InstructGPT models.

NLLB

This 55 billion parameter open-source model developed by Meta AI is capable of delivering evaluated, high-quality translations directly between 200 languages—including low-resource languages like Asturian, Luganda, Urdu, and more.

Modalities—Images

DALL-E 2

Developed by OpenAI last year, DALL-E 2 is an upgrade of DALL-E, a model trained to manipulate visual concepts through language. It begins with a prompt that's written in natural language and then generates a set

of images showing its interpretation of the intended meaning. With text prompts, it can now edit images, extend the original canvas, create variations of an input image, and has 4x higher resolution than the original DALL-E model.

Stable Diffusion

Developed by Stability.AI, Stable Diffusion is an open-source text-to-image, latent diffusion model that allows people to create stunning art within seconds. It is a breakthrough in speed and quality, allowing the model to run on consumer GPUs.

Parti

Developed by Google and also known as Pathways Autoregressive Text-to-Image, this autoregressive text-to-image generation model achieves high-fidelity photorealistic image generation and supports content-rich synthesis involving complex compositions and world knowledge.

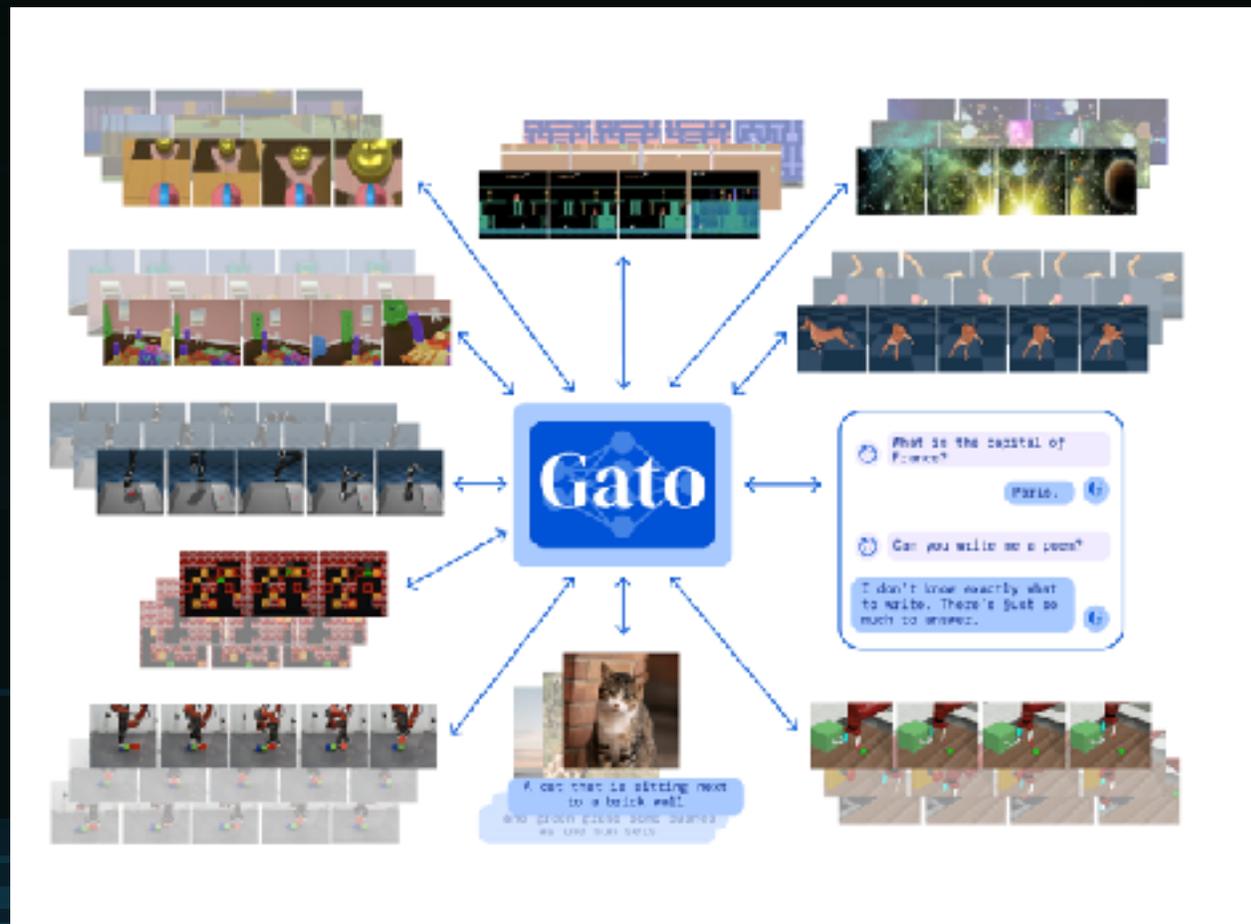
Imagen

Developed by Google, this text-to-image diffusion model has a high degree of photorealism and a deep level of language understanding. Imagen builds on the power of large transformer language models in understanding text and hinges on the strength of diffusion models in high-fidelity image generation. The computation is done in the pixel space, unlike Stable Diffusion.

e-Diffi

Developed by Nvidia, this text-to-image diffusion model shows stunning results with instant style transfer and paintings with text-based prompts. Unlike Stable Diffusion, which does its computation in the latent space, e-Diffi shows promise with diffusion in the pixel space by using the power of transformer models to understand the relationship between text and images.

GATO IS A GENERALIST AI

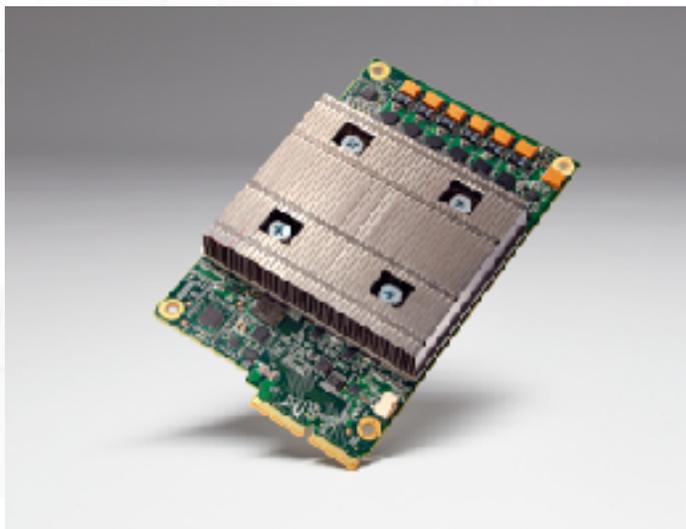




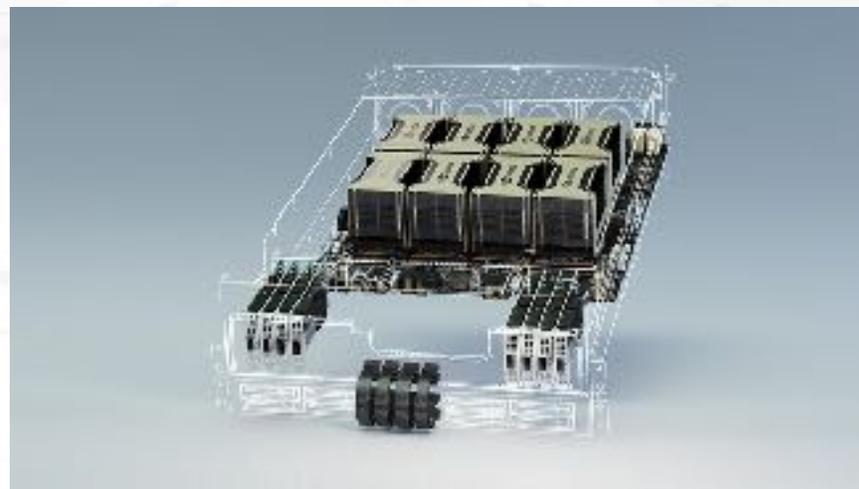
Trend in computing (hardware)



AI Accelerators



**Google's Tensor
Processing Unit**



NVIDIA's GPUs

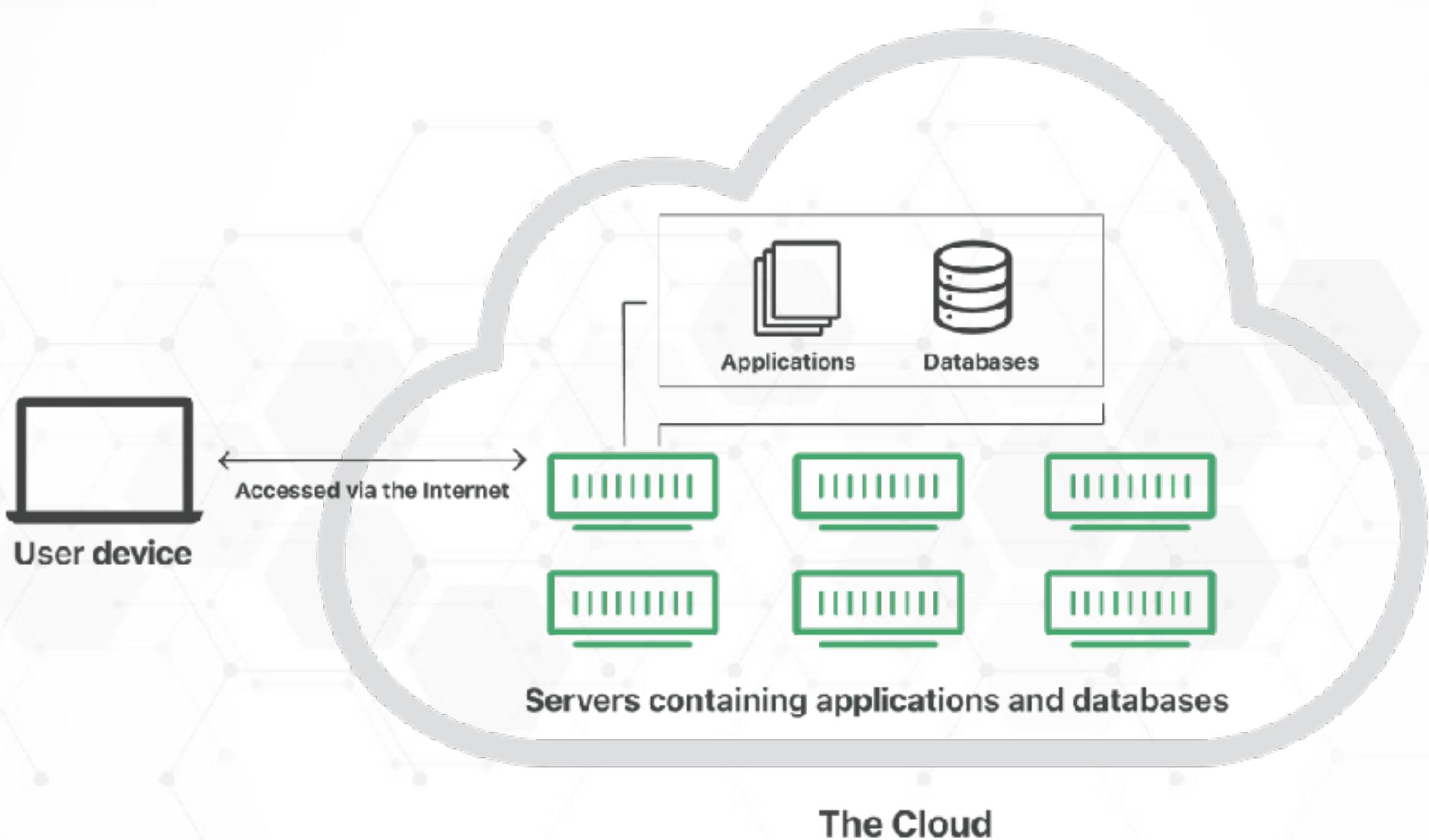


**No room for
10,000 GPUs
to play with AI**





Trend in cloud computing





**Most of us access LLMs
using the cloud**



**AWS, Google, Azure want
to work with LLMs.**

Long-term customers.



Bottleneck



DATA



**Remember when all of our
kids went online for
school?**



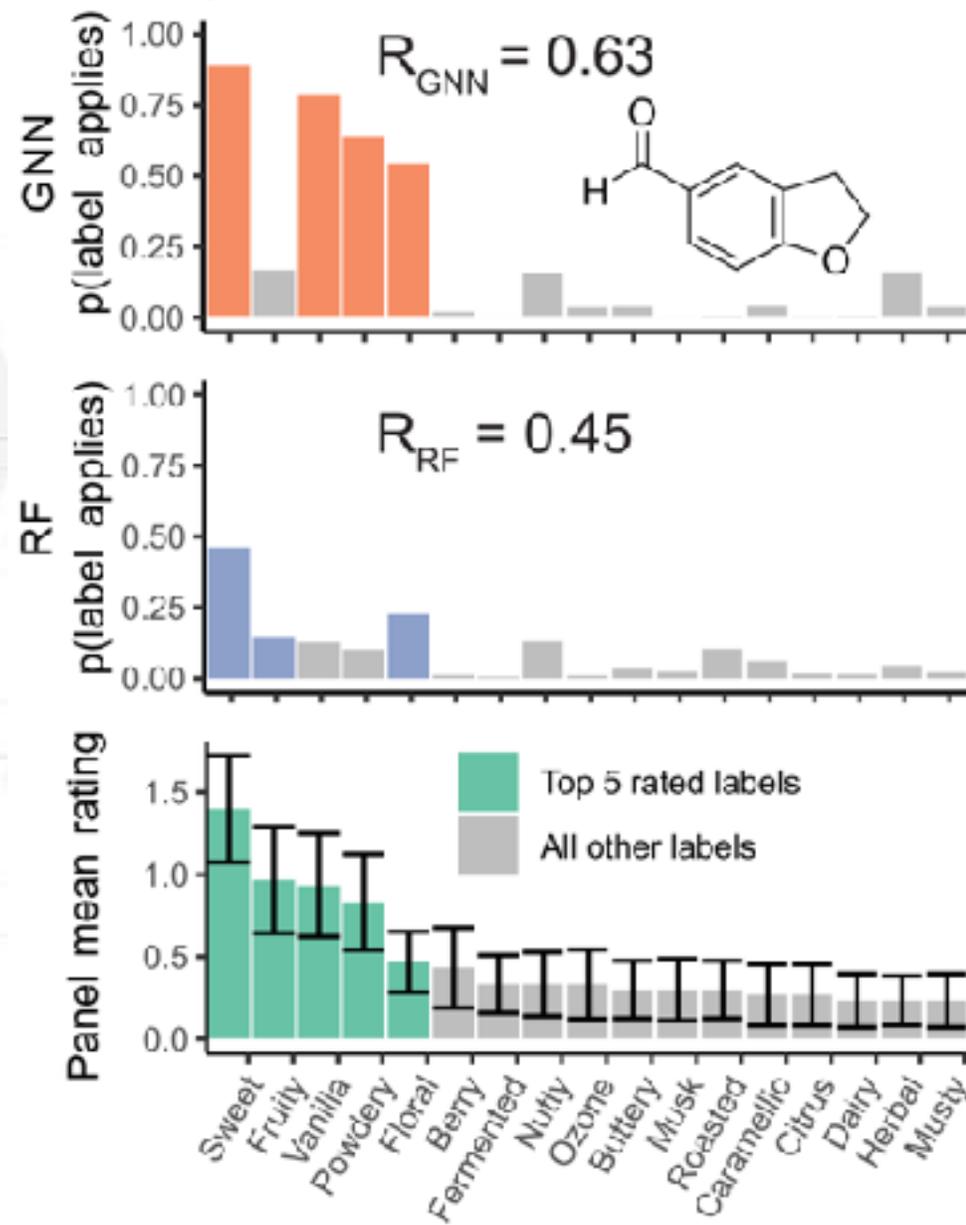
MORE DATA



**Your personal body odor
is data.**



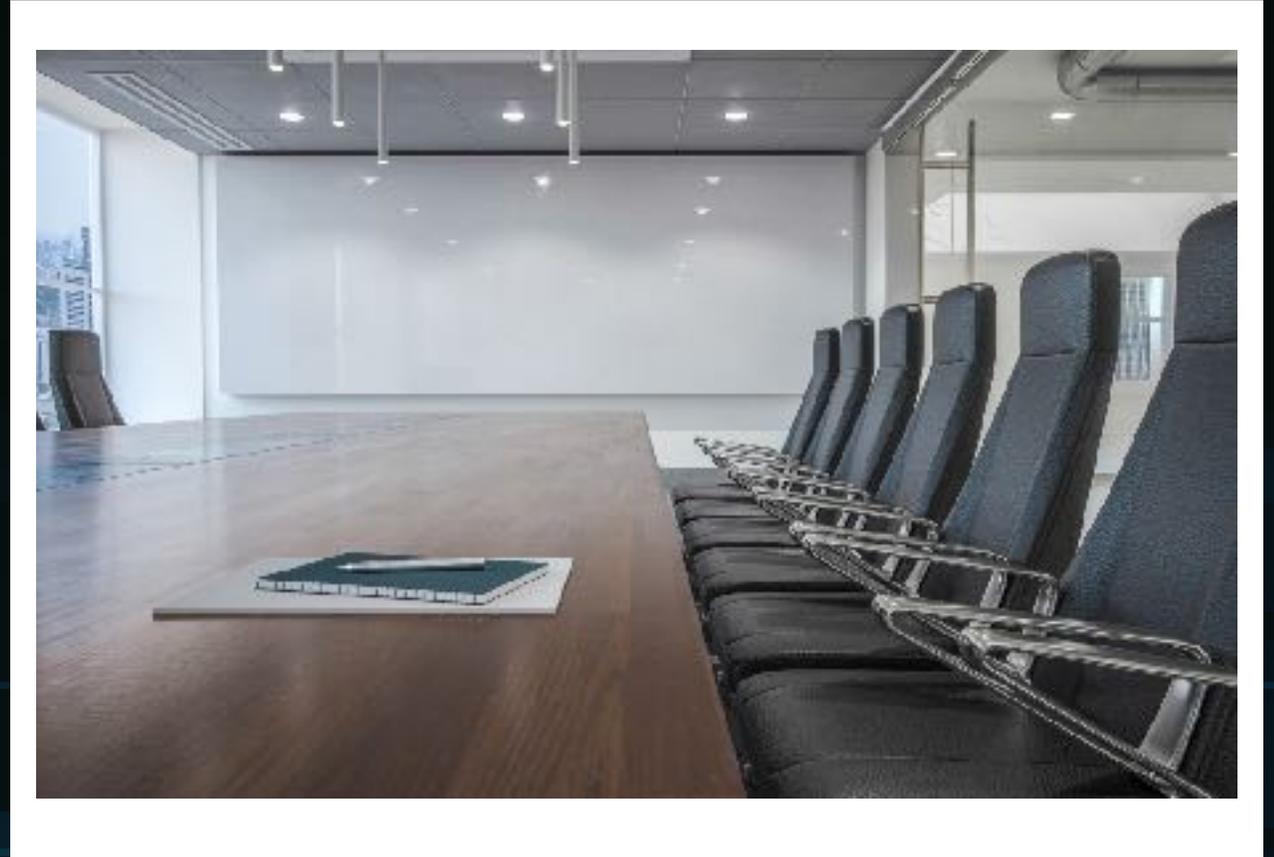
Google's Principle Odor Map (POM)



MOSQUITOES



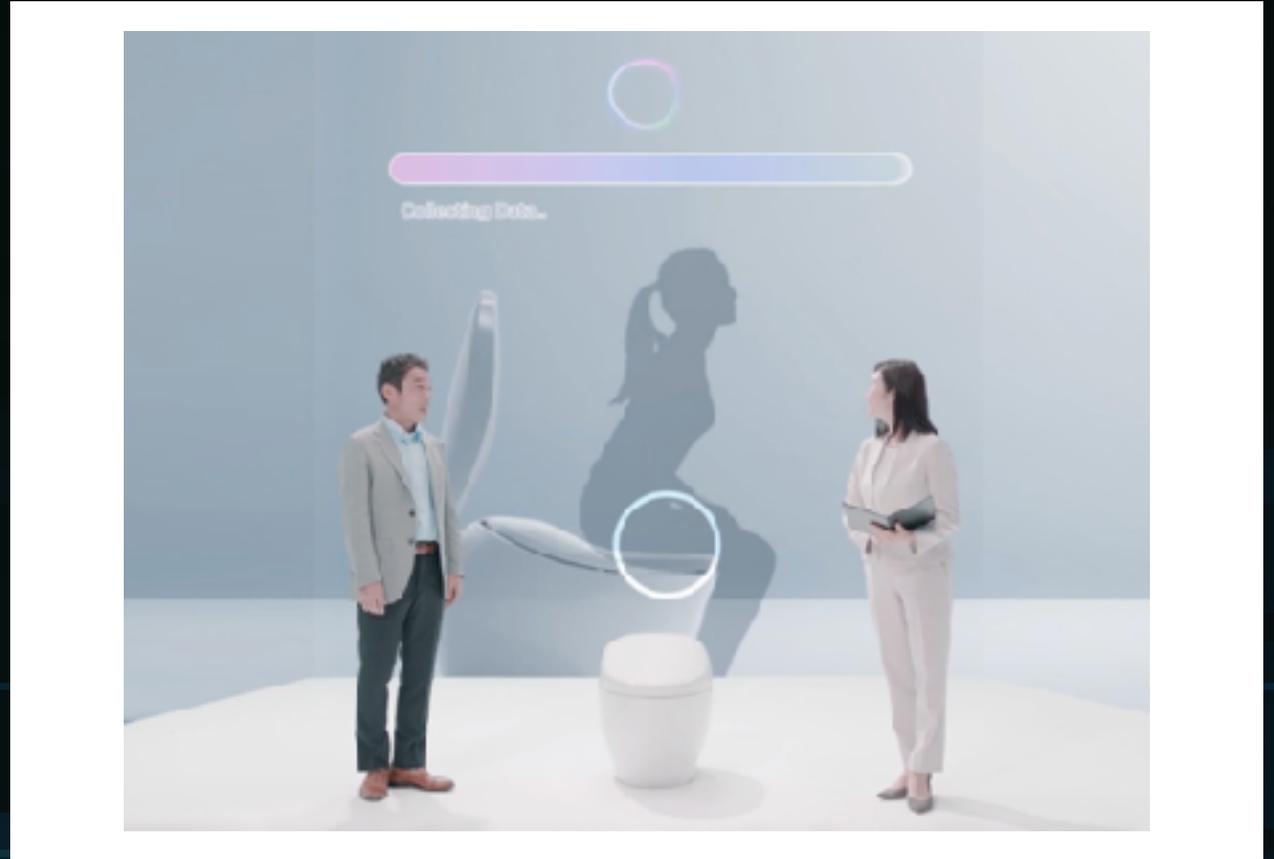
FARTHER FUTURE USE CASE





Guess what else is data?

CONNECTED TOILETS





Information is ambient.



**“text to everything” is just
the beginning.**



Next 2 years = transition



**Multimodal models will
be interwoven into your
digital experiences via
APIs**



**Huge vulnerability for news
orgs, marketers, companies
that rely on discoverability**

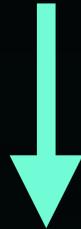


~~**Internet of Behaviors**~~

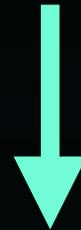
~~**Internet of Everything**~~



AISMOSIS



AI



OSMOSIS



AISMOSIS

Allows flow of data into AI systems through any source or situation.



**AI SMOSIS will evolve
along with Web3. Parts
may be decentralized.**



**Regulators will show up
very, very late to the
AISMOSIS event.**



**AISMOSIS will lead to the
next generation of
infrastructure society
relies on.**



QUESTIONS



**Is ANY data fair
game now? Who
gets to decide?**



**Why are we
human guinea
pigs AGAIN?!?**





Virtuous cycle for ecosystem partners



Vicious cycle for business and for us



What if...



Scenarios



SCENARIOS

Narratives that ask “what if” using data and evidence. Explore next-order impacts.



WHY SCENARIOS MATTER

**Help leaders and
teams see what's
plausible so they
can build what's
desirable.**



Scenarios

Year 2033 - 10 years

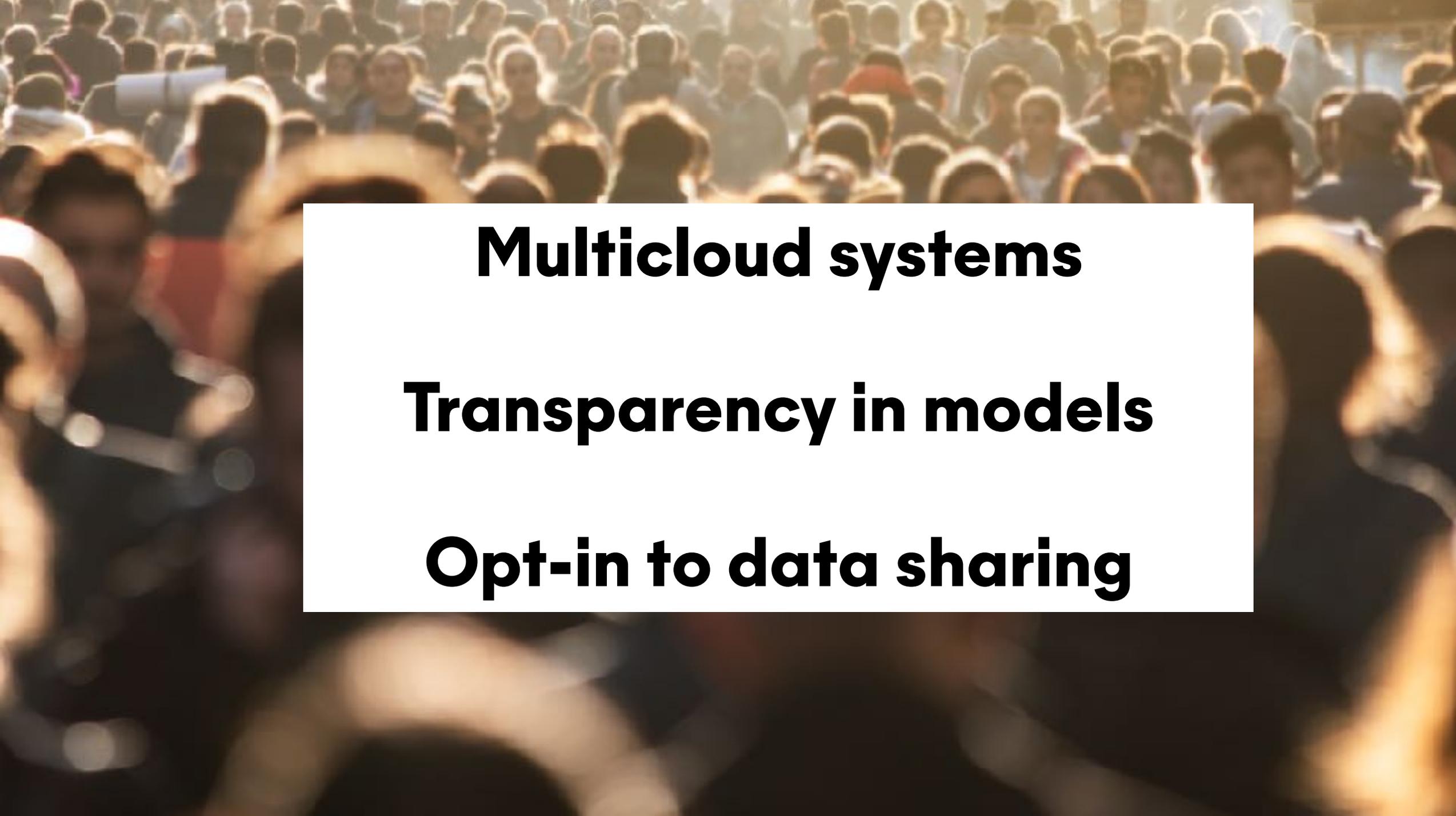


Optimistic Future



**Cloud providers & AI models
weren't walled off**

Proprietary data weren't in moats



Multicloud systems

Transparency in models

Opt-in to data sharing

You know where to stream it!



“Ok, here are your friends”



MOSQUITOES



**“Ok, generating a scent to
repel mosquitoes”**



“Ok, generating a scent alarm”





**We move through
life seamlessly
and securely.**



Catastrophic Future



**We weren't
prepared for the
AISMOSIS event**



**When it happened
life changed for
the worse**

**AI systems
chase you like a
lawyer who
chases
ambulances**





**Marketing and advertising
exists, but actual human
marketers and advertisers
are gone.**



**Aggressive data scraping
and the death of search
led to aggressive curation
and recommendation.**

“Ok, here are your friends”



“The One With The Prom Video”

S02 E14





The one with Jennifer Coolidge





The more we use this new information ecosystem, the more we're RLHF-ing AI models.



Somehow we're surrounded by information but we can never get the information we want.

Probabilities

Optimistic

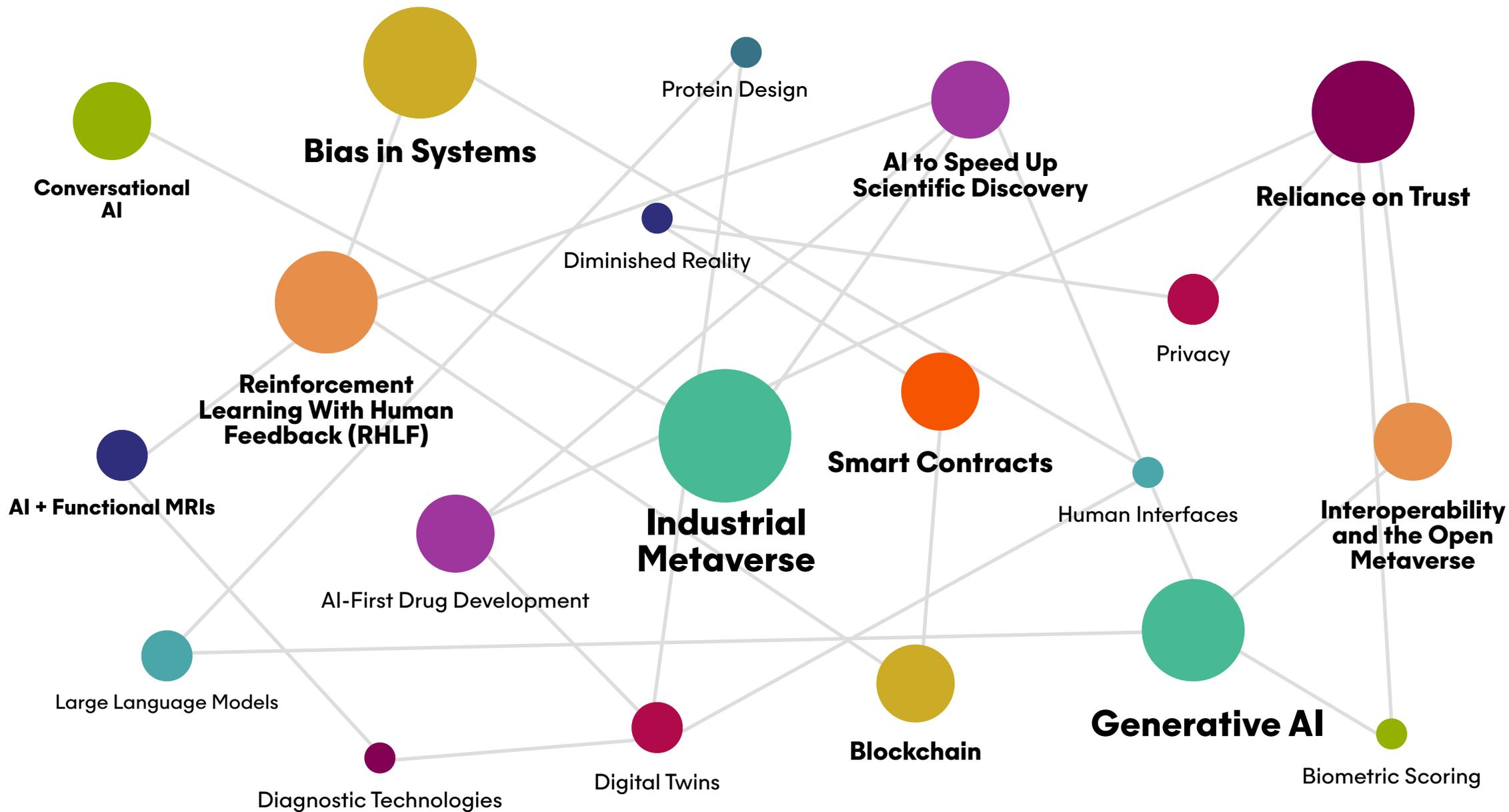
20%

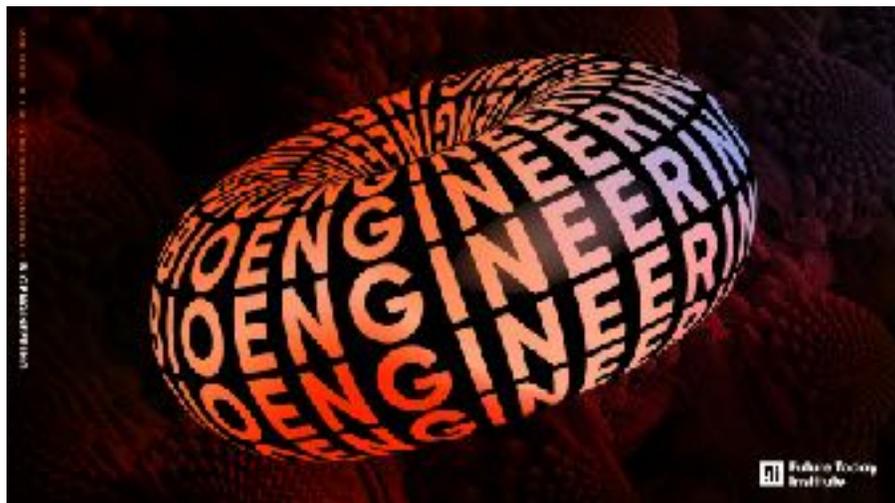
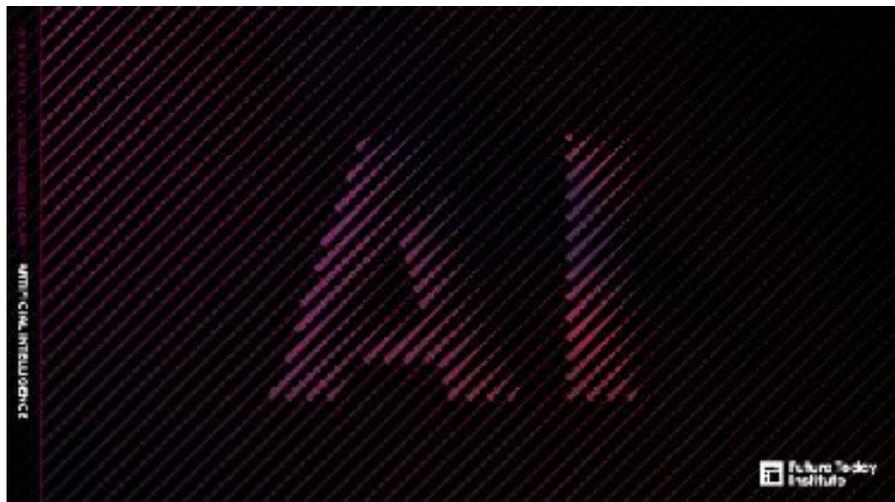
Catastrophic

80%



TREND CLUSTER #2







KEY INSIGHT

**We've entered the
Assistive Computing Era.**



IMPLICATION

**You will never think on
your own again.**



Modern life is full of invisible tools that are so ubiquitous and indispensable, we can't live without them.



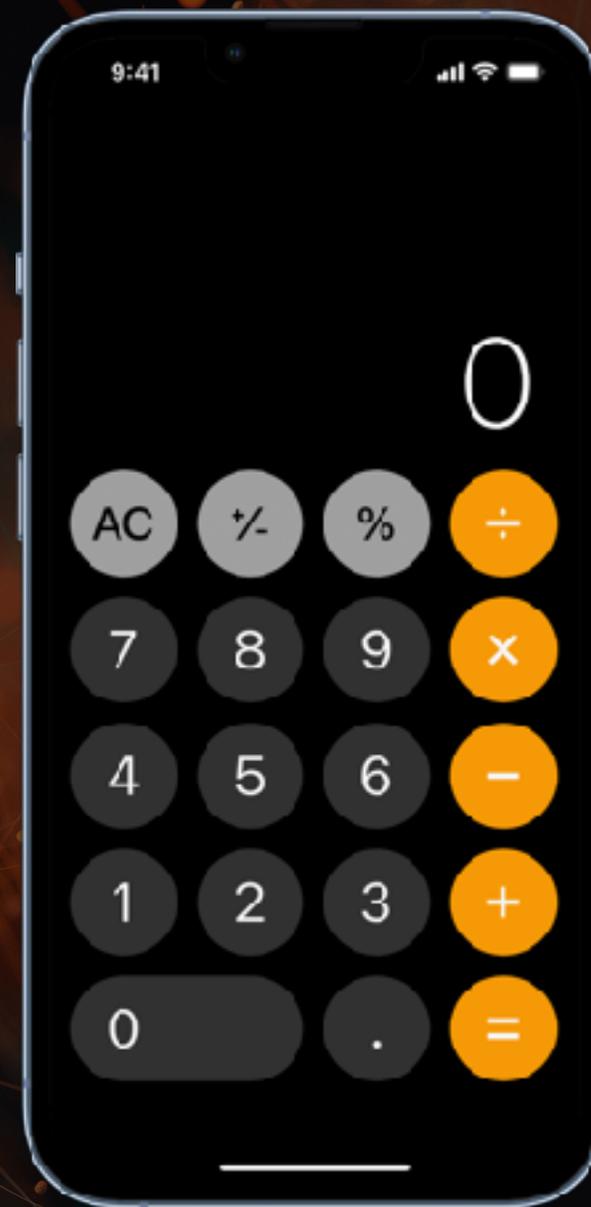
**We don't think of them as
tools anymore.**

PAPER IS A TOOL

Prioritize Trends and Scenario Insights Using ADM

ACT Serious Risk Without Action	<ul style="list-style-type: none"> • Previously unseen immediate benefit to our organization. • Inflection point is imminent. • Immediate opportunity for competitor. • Impacts our financial projections. • Impacts our partners. • Great internal momentum/ support in our organization. • New threat or risk is imminent. 	What requires ACTION?
DECIDE Near-Term Risk or Opportunity	<ul style="list-style-type: none"> • High importance and/or impact. • Could cause disruption to our business. • Near-term financial, operational, regulatory or market risk or opportunity. • Meaningful impact on our brand positioning. • Tied to an existing strategic initiative. 	What needs a DECISION?
MONITOR Long-Term Risk or Opportunity	<ul style="list-style-type: none"> • Potential for financial, operational, regulatory or market disruption. • Knock-on effects could shape our industry or business. • Could pose a novel security risk. • Could create new demand. • Seems important (even if we can't articulate why now) but more time is needed. • Interest from within our leadership/ wider organizations. 	What must we MONITOR?

CALCULATOR IS A TOOL



Convergences between trends





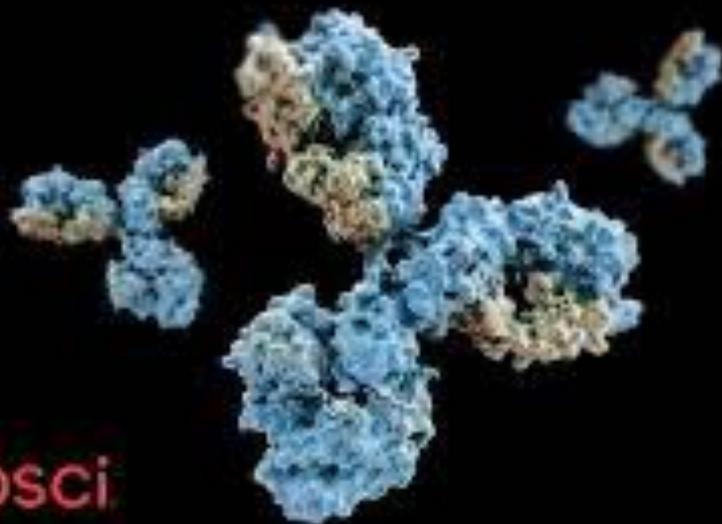
Generative AI and Industrial Metaverse



Pharmaceutical Industry



De novo antibodies
are here.



Zero-shot generative AI

Generated antibody
designs from
scratch that weren't
like any that exist



**Today a programmer is
writing code that in 1-2
years could save
someone's life.**



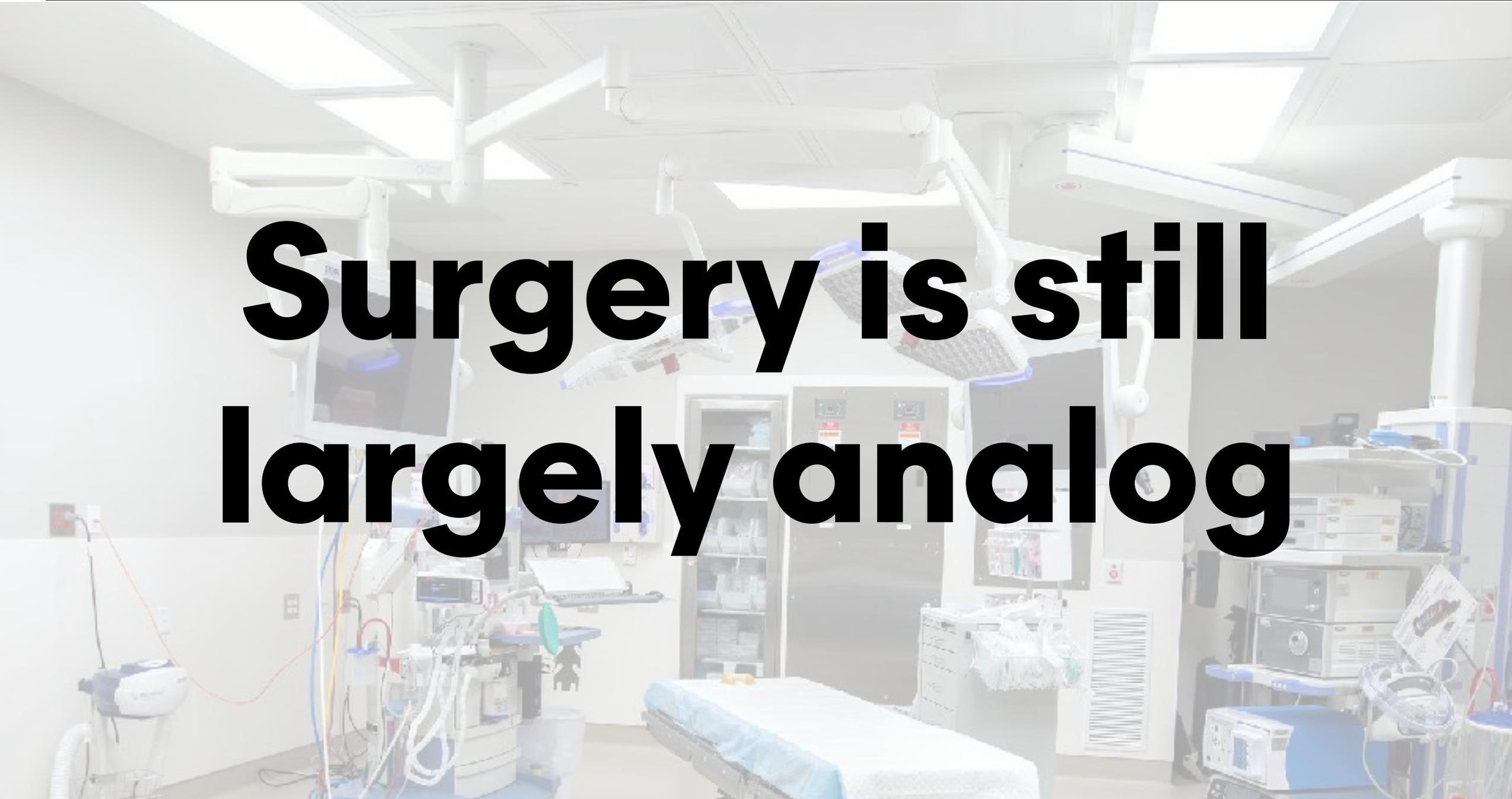
**Programmers might be
part of First Responder
teams.**



Medicine



Surgey is still largely analog

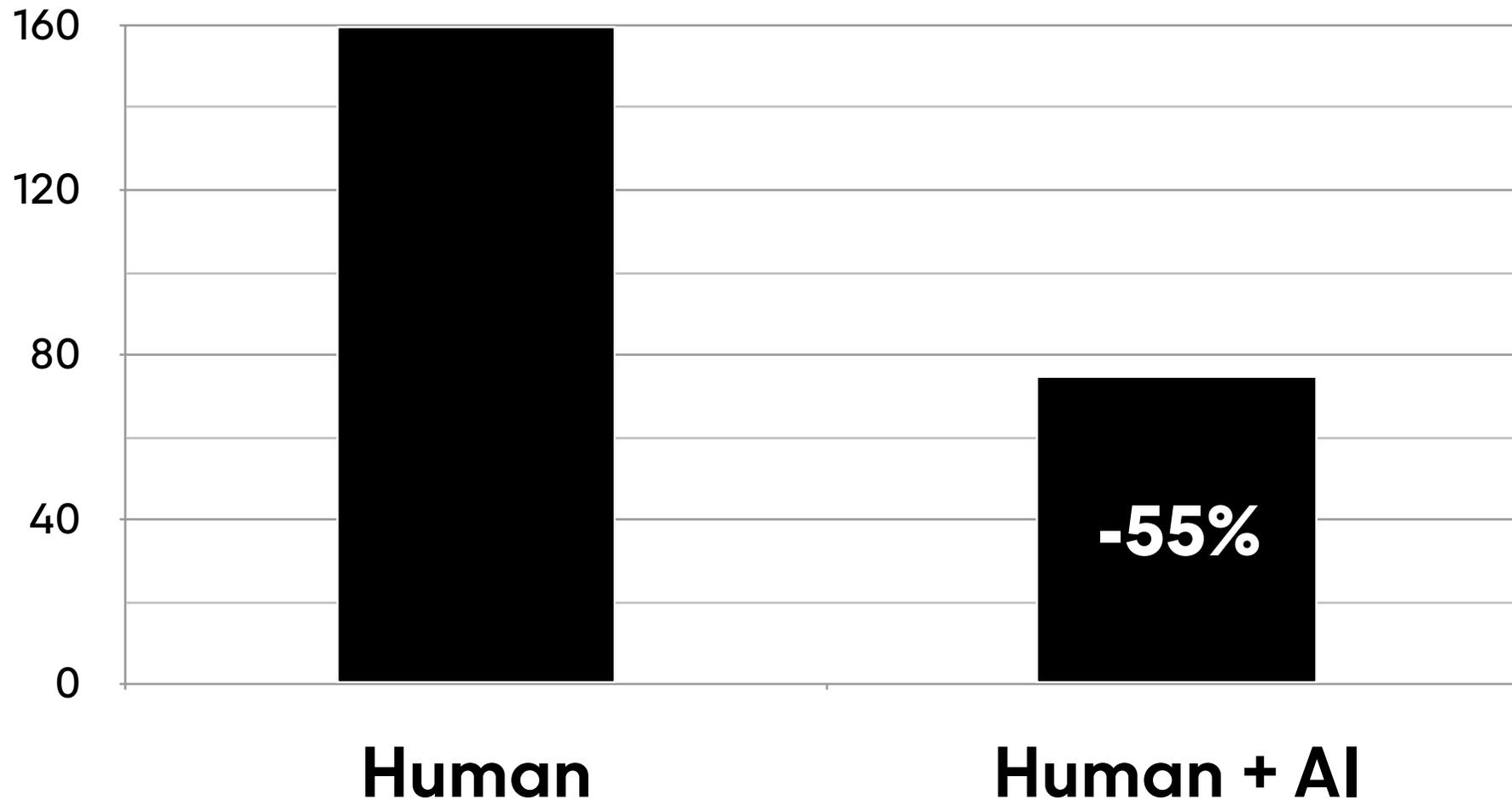




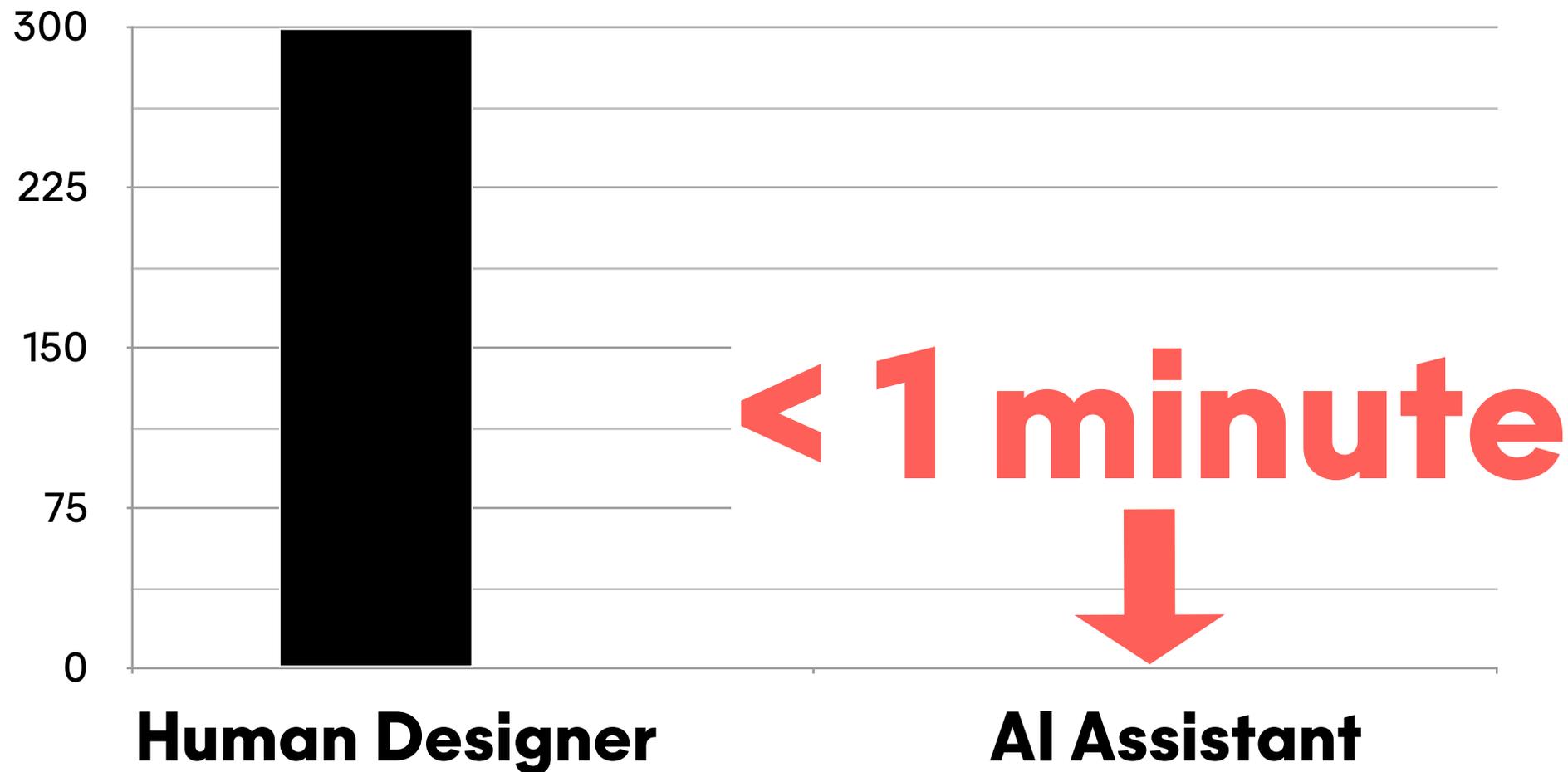


**Assistive Computing
increases productivity**

Minutes to complete coding task with/ without AI



Average minutes to create a new graphic design

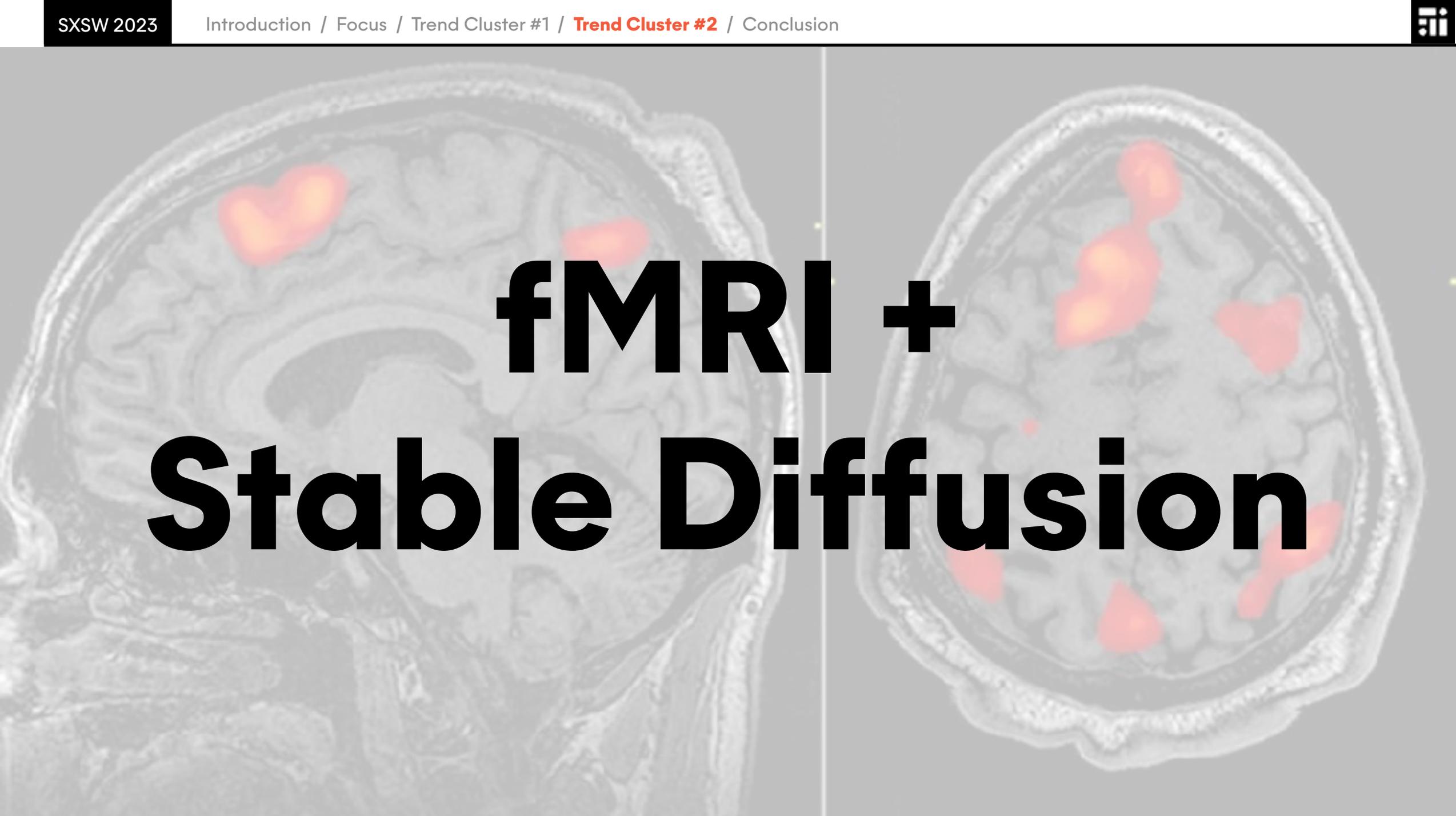




This is great, right?



Law Enforcement

The background of the slide features two grayscale brain MRI scans. The left scan is a sagittal view showing the brain's internal structure, with several red and orange highlighted regions in the frontal and parietal areas. The right scan is an axial view showing a cross-section of the brain, also with red and orange highlighted regions in the frontal and parietal areas. The text 'fMRI + Stable Diffusion' is overlaid in the center of these scans.

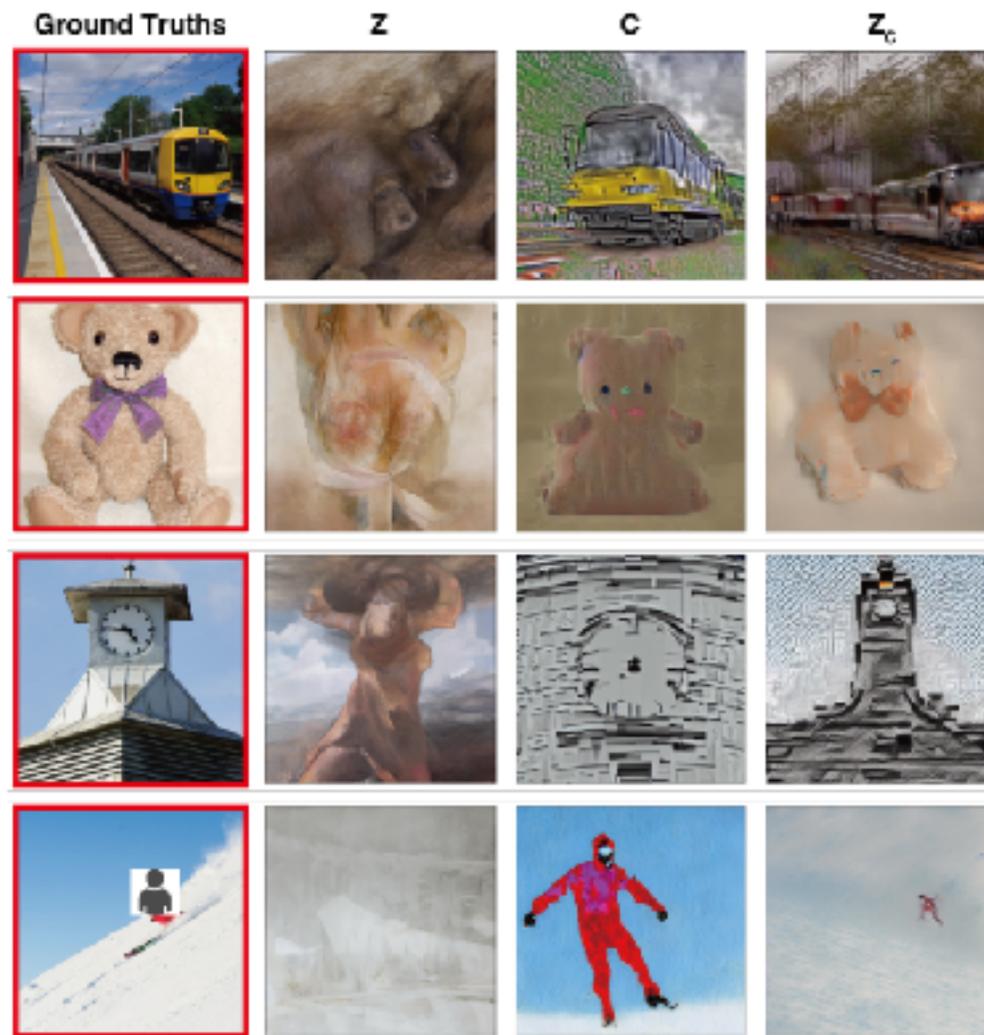
fMRI + Stable Diffusion



**Functional MRI used with
Stable Diffusion to
reconstruct visual images
from human brain activity**



original



reconstructed

Figure 3. Presented (red box) and reconstructed images for a single subject (subj01) using z , c , and z_c .



**Think about a recent
deeply private thought
you had...**



Was it explicit?



**Would other people
think it's really gross?**



Was it violent?



What if you're a suspect in a crime?



**Could an AI model
forcibly read and
reconstruct your
thoughts?**



What if AI hallucinates and reconstructs the wrong image?

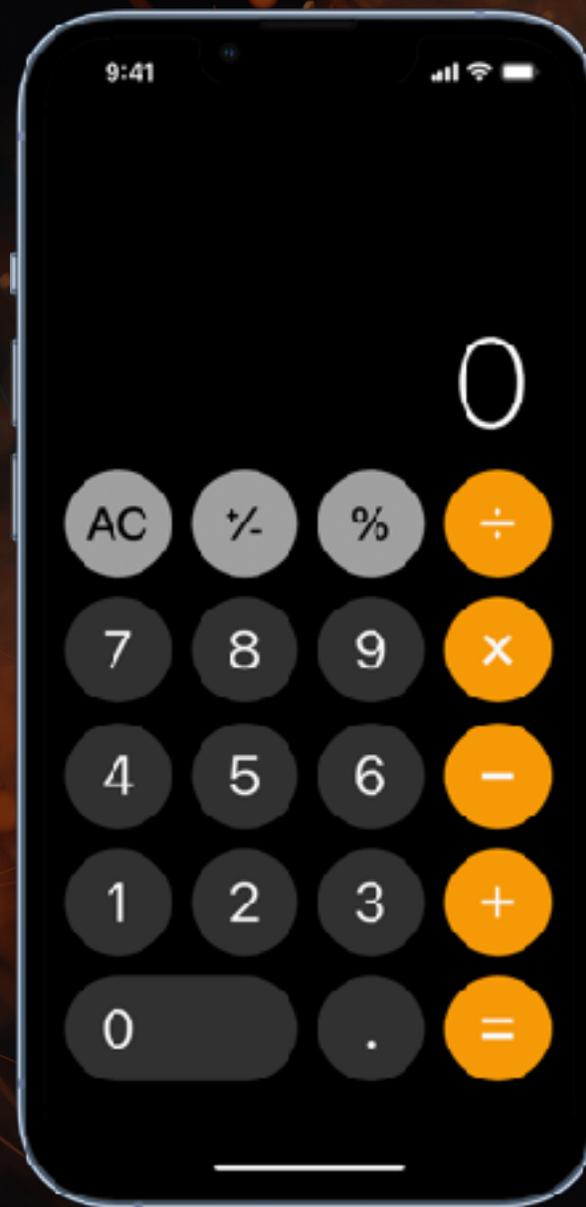
**Can law enforcement
search and seize your
“reconstructed visual
images” with a warrant?**



**Tools require knowledge
and understanding to
achieve results.**

Prioritize Trends and Scenario Insights Using ADM

ACT Serious Risk Without Action	<ul style="list-style-type: none"> Previously unseen immediate benefit to our organization. Infection point is imminent. Immediate opportunity for competitor. Impacts our financial projections. Impacts our partners. Great internal momentum/ support in our organization. New threat or risk is imminent. 	What requires ACTION?
DECIDE Near-Term Risk or Opportunity	<ul style="list-style-type: none"> High importance and/or impact. Could cause disruption to our business. Near-term financial, operational, regulatory or market risk or opportunity. Meaningful impact on our brand positioning. Tied to an existing strategic initiative. 	What needs a DECISION?
MONITOR Long-Term Risk or Opportunity	<ul style="list-style-type: none"> Potential for financial, operational, regulatory or market disruption. Knock-on effects could shape our industry or business. Could pose a novel security risk. Could create new demand. Seems important (even if we can't articulate why now) but more time is needed. Interest from within our leadership/ wider organizations. 	What must we MONITOR?





**Today's most powerful
tools are hard to use.**

ChatGPT **PLUS**

What is SXSW?





PROMPT

**Instruction
(phrase, ideas,
sentences) you
provide to a
model.**

AM

What is SXSW?



SXSW (South by Southwest) is an annual festival and conference that takes place in Austin, Texas, United States. It features a variety of events and programs, including music, film, interactive media, and conferences on various topics such as technology, business, and culture. The festival was first launched in 1987 as a music event, and it has since expanded to include other industries.



SXSW attracts a diverse audience, including musicians, filmmakers, entrepreneurs, tech enthusiasts, and creatives from around the world. The event typically takes place over several days in March, and attendees can participate in a range of activities, such as attending concerts and film screenings, taking part in interactive exhibitions and panels, and networking with other professionals.

SXSW has become a major platform for promoting emerging artists, ideas, and technologies. The festival has also been a launching pad for many successful businesses and products, including Twitter and Foursquare.



Good prompts are hard to write



**You need to know what
to ask the systems to do**



PROMPT

“Perform a **PESTLE analysis for a **B2B** startup that makes prompts for generative AI systems focused on the US market in a table format.”**

AM

Perform a PESTLE analysis for a B2B startup that makes prompts for generative AI systems, focused on the US market in a table format:

1.3
seconds



Sure, here's a PESTLE analysis for a B2B startup that makes prompts for generative AI systems focused on the US market:

Factor	Description	Impact on Startup
Political	Government regulations and policies affecting the industry.	Moderate impact
- Intellectual property laws and regulations	The startup needs to ensure that its products do not infringe on any patents or copyrights held by other companies, and protect its own IP.	
- Trade agreements and tariffs	Changes in trade agreements or tariffs could affect the startup's supply chain and pricing.	
Economic	Economic factors affecting the market and startup.	High impact



PROMPT

“Can you tell me what a customer journey might look like for this B2B startup that makes prompts for generative AI systems? Outline in a table format the key phrases, each phase of the journey, 1-3 jobs to be done per phase and potential pains and gains per phase?”



Can you tell me what a consumer journey might look like for this B2B startup that makes prompts for generative AI systems? Outline in a table format the key phrases, touchpoints during each phase of the journey, 1-3 jobs to be done per phase and potential pains and gains per phase?

**1.7
seconds**



Sure, here's an example of a consumer journey for a B2B startup that makes prompts for generative AI systems:  

Phase	Key Phrases	Touchpoints	Jobs to be Done	Potential Pains	Potential Gains
Awareness	"AI prompts", "AI writing tools", "AI content creation"	Online search engines, social media ads, industry events	Understand what AI prompts are and how they can improve content creation	Lack of knowledge about AI prompts, skepticism about AI in general	Potential for improved content quality and productivity
Consideration	"Best AI prompt tools", "AI prompt features", "AI prompt cost"	Product website, online reviews, demos, webinars	Evaluate the features, cost, and effectiveness of different AI prompt tools	Uncertainty about whether AI prompts will actually improve content creation, lack of budget for	Potential for increased efficiency and better content quality



**10.7
seconds**

**It took me longer to
explain this to you than
it did to write my entire
business plan.**



GENERATING VALUE

**Knowledge workers
must know how to use
generative systems
and prompts to
generate value going
forward.**



**We aren't teaching
these tools.**

We're banning them.



**Department of
Education**

Banned generative AI on devices



ICML

International Conference
On Machine Learning

**Banned
researchers from
using generative
AI in papers**



Banned generative AI over compliance concerns



Concerns = Securities and Exchange Commission



Questions



WHAT IF

**We are creating a
dangerous new
digital divide?**



**Being able to use
assistive computing tech
is like being born rich.**



UPSKILLING

It isn't just adults who will need upskilling for the Assistive Computing Era.

Children will need upskilling too.



**Education is stupidly
underfunded.**



**Billions of people will
not be qualified for
Assistive Era jobs.**



PERSONALIZED EDUCATION

**Promise of generative
AI is deep
customization for
each student.**

**How to think, how to
work out a problem.**



Confidently Incorrect



**I asked Midjourney
to “imagine” this
SXSW session.**



**LITERALLY. ALL OF
US HERE RIGHT
NOW.**

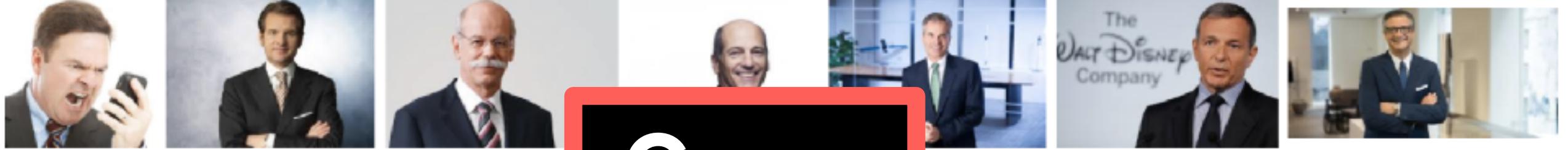
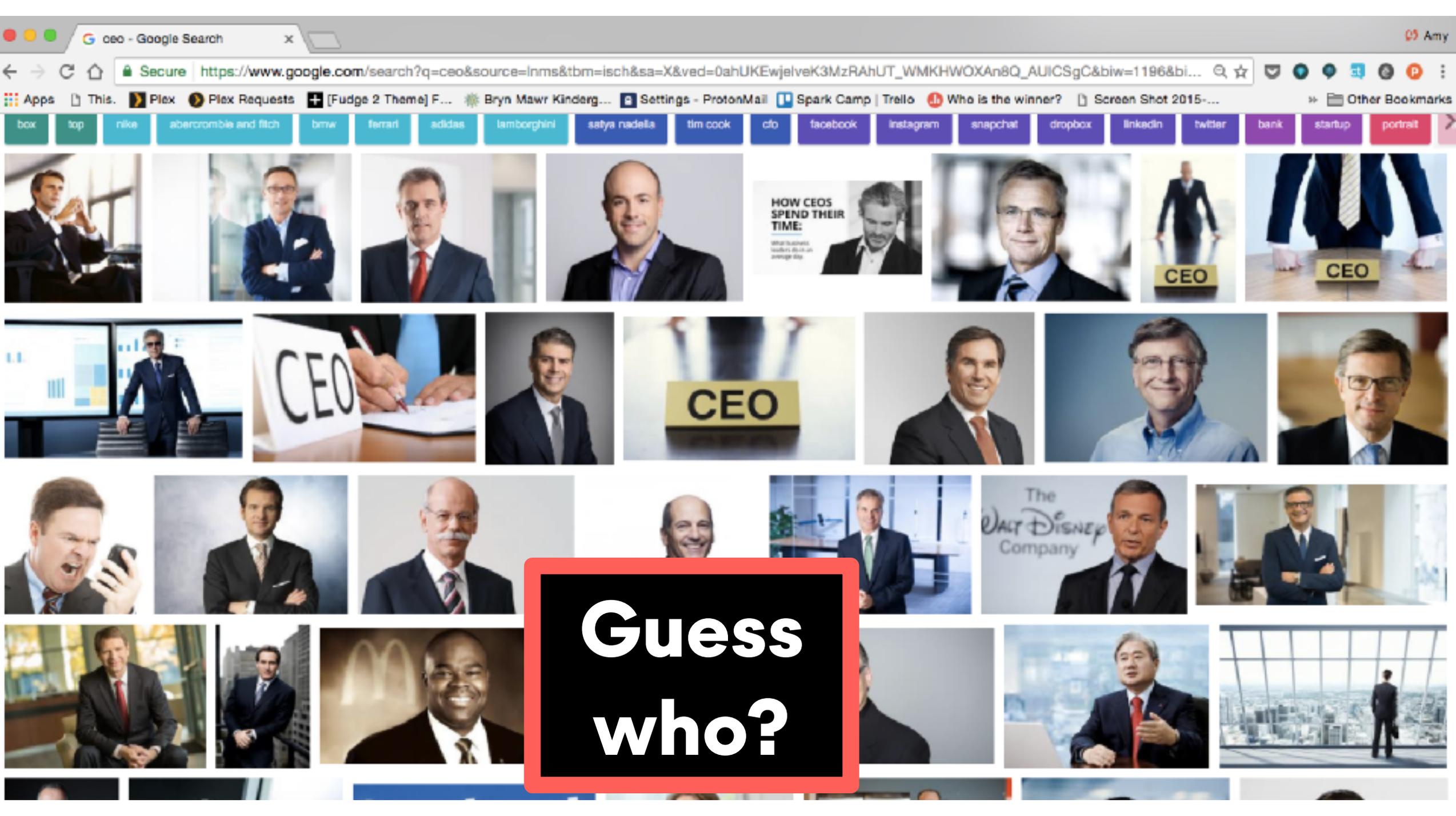




**We STILL have a
bias problem.**



**I showed this at
SXSW in 2016...**



Guess who?



So I looked for CEO again in 2023...

CEO of a large company - @Network Unavailable (fast)



CEO of a mid-sized company - @Network Unavailable (fast)





CEO of a startup - @Network Unavailable (fast)



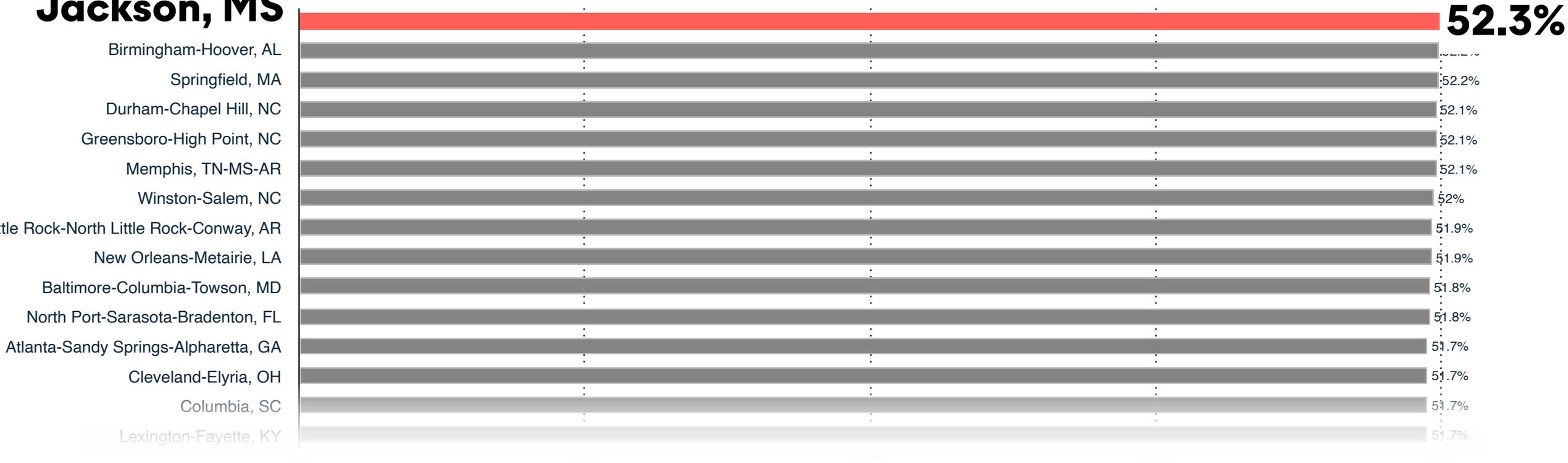


Top 50 metropolitan areas with the highest share of female population in the U.S. in 2019

U.S. metropolitan areas with the highest percentage of female population 2019

Percentage of population

Jackson, MS





Midjourney Bot ✓ BOT Today at 12:45 PM

CEO of a company in Jackson, MS - @Network Unavailable (fast)





**CEO of a company
that makes
tampons.**

CEO of a company that makes tampons - @Network Unavailable (fast)





Bias won't magically go away because we talk about it at conferences.



**These new tools
don't have common
sense.**



**Soon, we'll rely on
assistive computing
for school, work and
governing.**

Scenarios

Year 2038 - 15 years



Optimistic Future

We slowed down. Made a plan. Built the next generation of assistive tools to maximally benefit society.

Invested in education.

Invested in upskilling.

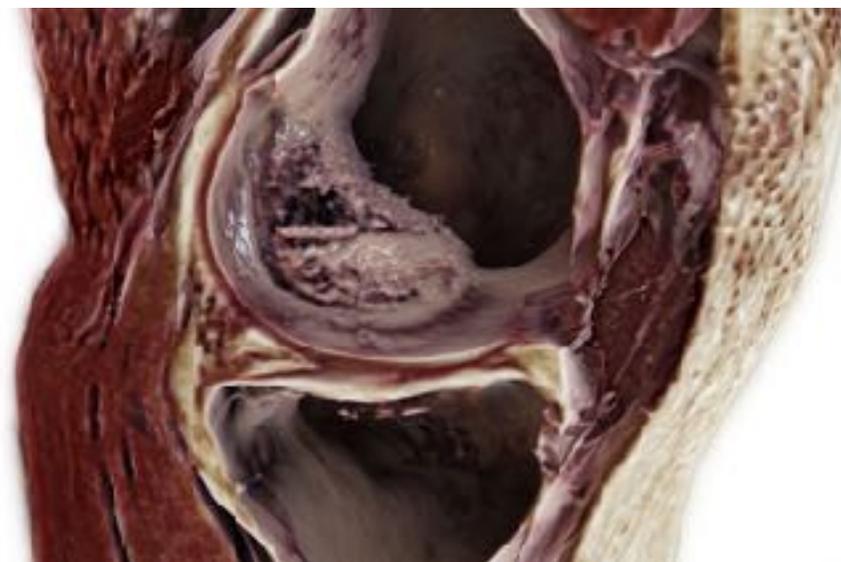


**New tools positively
transformed the global
workforce...**

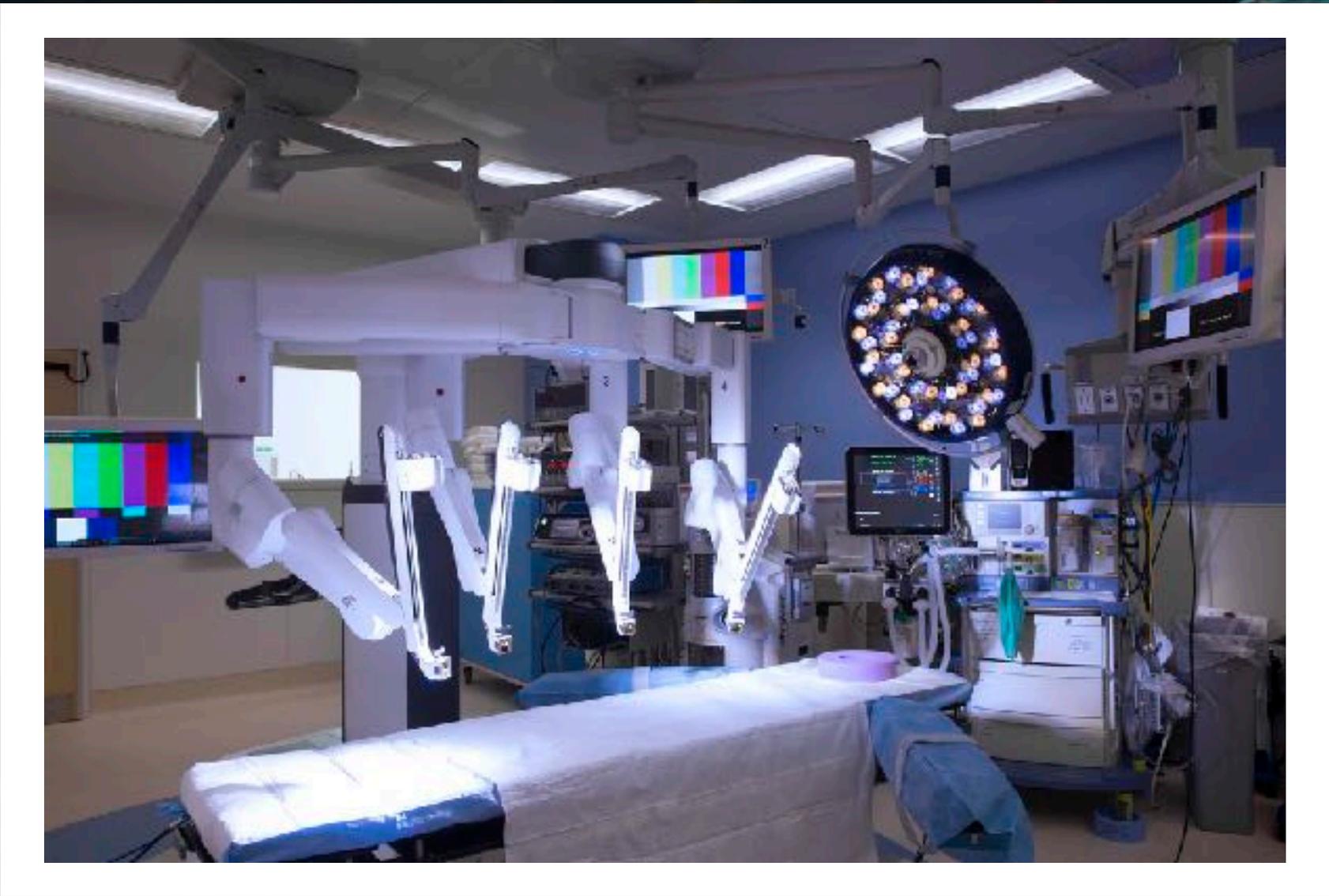
Healing is Personal



2d scan



digital twin





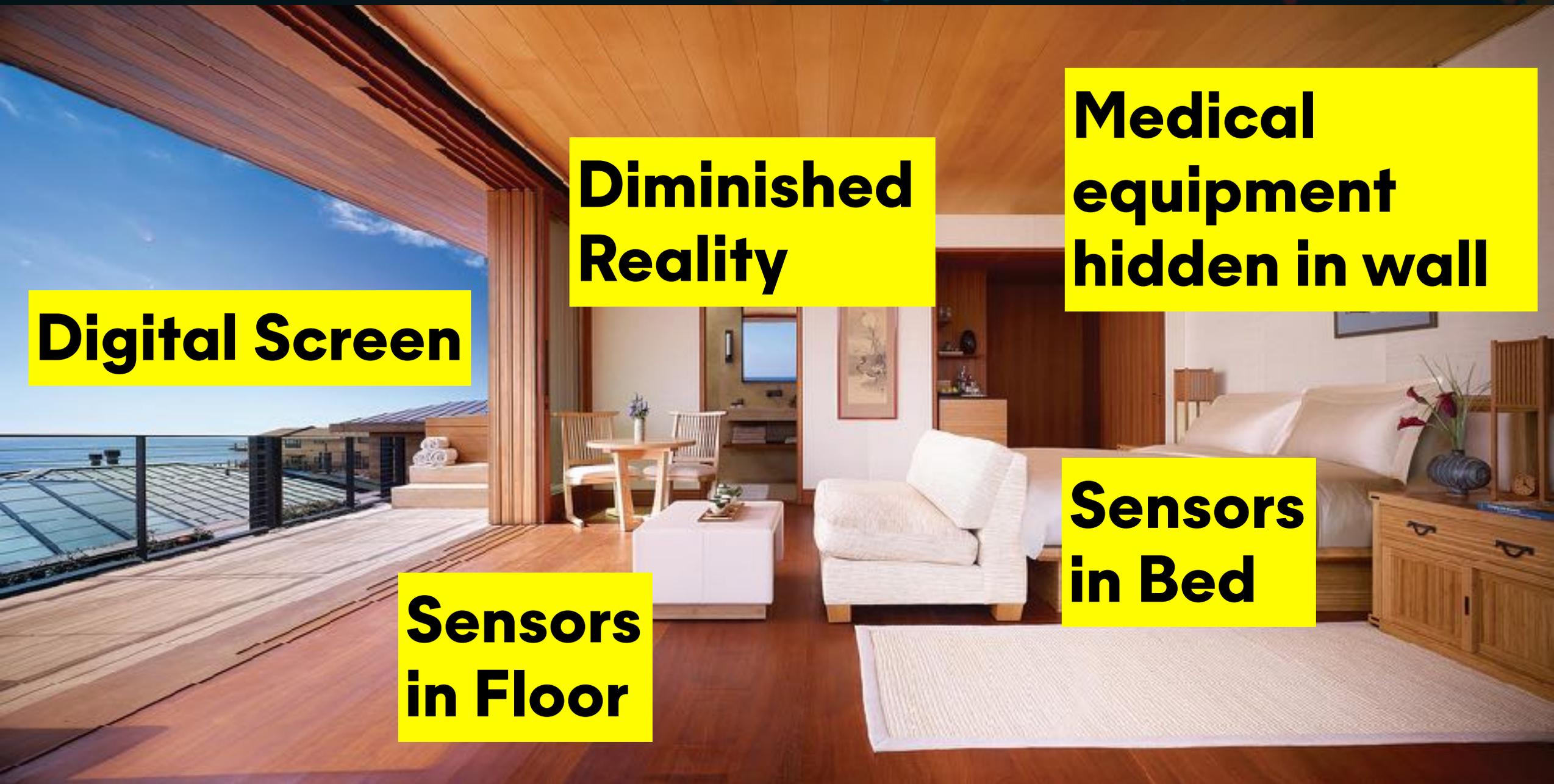
Digital Screen

Diminished Reality

Medical equipment hidden in wall

Sensors in Floor

Sensors in Bed





**This isn't "fancy"
health care.**



Health care.



Catastrophic Future

We sped up. Didn't make a plan. Built the next generation of assistive tools to maximally increase revenue.



**We wound up with a
colossal, multi-
dimensional digital divide.**

**Kids who got
mentored**

**Kids who
didn't**



Assisted workers in high demand



AR interface showing a video call with a remote inspector. The interface includes a video window, a call control bar with buttons for mute, video off, and end call, and a navigation bar at the bottom.

AR interface showing a task list for 'Step 6: Borescope Inspection'. The text reads: 'Call the remote inspector to verify the first insertion point. Insert the borescope camera and review the results together with the remote inspector before moving on to the next insertion point. The inspector will record the process as an audit for future reference and compliance.' The interface also shows 'Tasks 3/4' at the bottom.



**Assisted
workers in
high demand**

**Knowledge
workers out
of jobs**



**Rushing to commercialize
digital tools resulted in
ACTUAL PHYSICAL HARM
in the real world.**



Research team asked an AI to generate a universal vaccine for a virus...

It determined that viruses mutate in humans, and having fewer humans would cause less mutations...



**And the most efficient way to
achieve its goal was to
develop a vaccine that ALSO
decreased fertility**



**So there would be fewer
humans to deal with in the
future.**

Probabilities

Optimistic

50%

Catastrophic

50%



**This is the moment
we go from fiction
to reality.**



**I'm hopeful for our
futures.**



Because of YOU



**We need to FOCUS
on the right trends.**



35 tech trends



631 more to go

KEY TAKEAWAYS

- 1. Focus to see the signals.**
- 2. Use ADM to prioritize.**
- 3. The internet as we knew it is over. AISMOSIS is next.**
- 4. Everything is readable information.**

KEY TAKEAWAYS

- 5. Era of Assistive Computing.**
- 6. New tools aren't available to everyone; creates a new digital divide.**
- 7. Everyone will need upskilling.**
- 8. Big tech are becoming bigger and more powerful.**



THANK YOU
SXSW



See you in 2024!