

The AI Revolution Is Here

How to Prepare Your Business for the Future

WSI | BNI

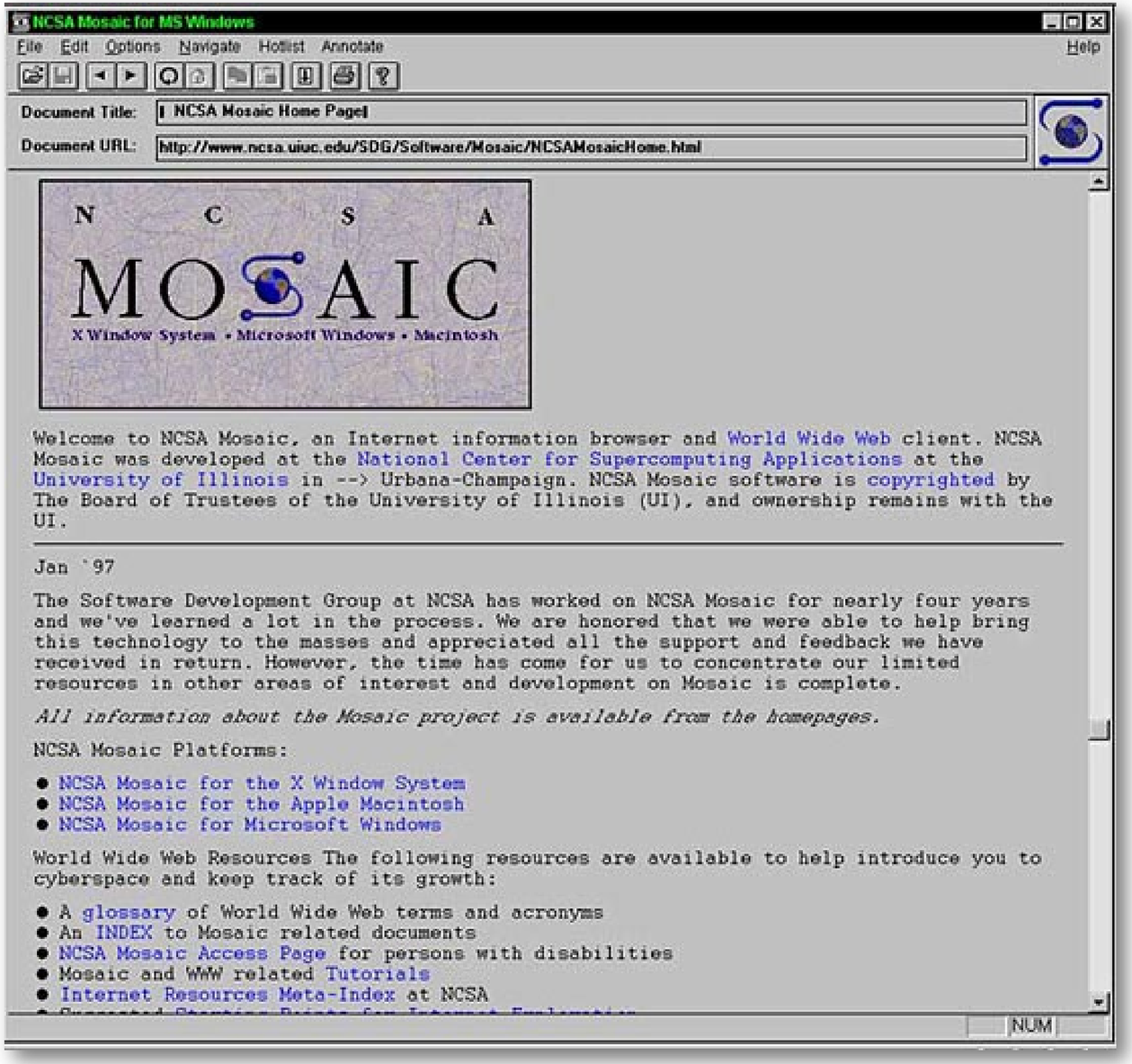
Time Machine Ride…Back to 1992








JANUARY 1994 • $1.95
PRINTED IN U.S.A.
Popular Mechanics
1994 DESIGN & ENGINEERING AWARDS
Best Products, Designs And Ideas Of The Year
UNDERSTANDING THE INFORMATION SUPERHIGHWAY
How You'll Shop, Bank, Learn, Be Entertained And More Via Interactive TV
THE GREATEST SOCIAL REVOLUTION SINCE THE AUTOMOBILE
NEW LIFE FOR DEAD BATTERIES
Revolutionary System Revives All Ordinary Alkaline Cells
BEAUTIFUL CONCRETE?
Yes! Stamped Concrete Adds High Class Without High Cash

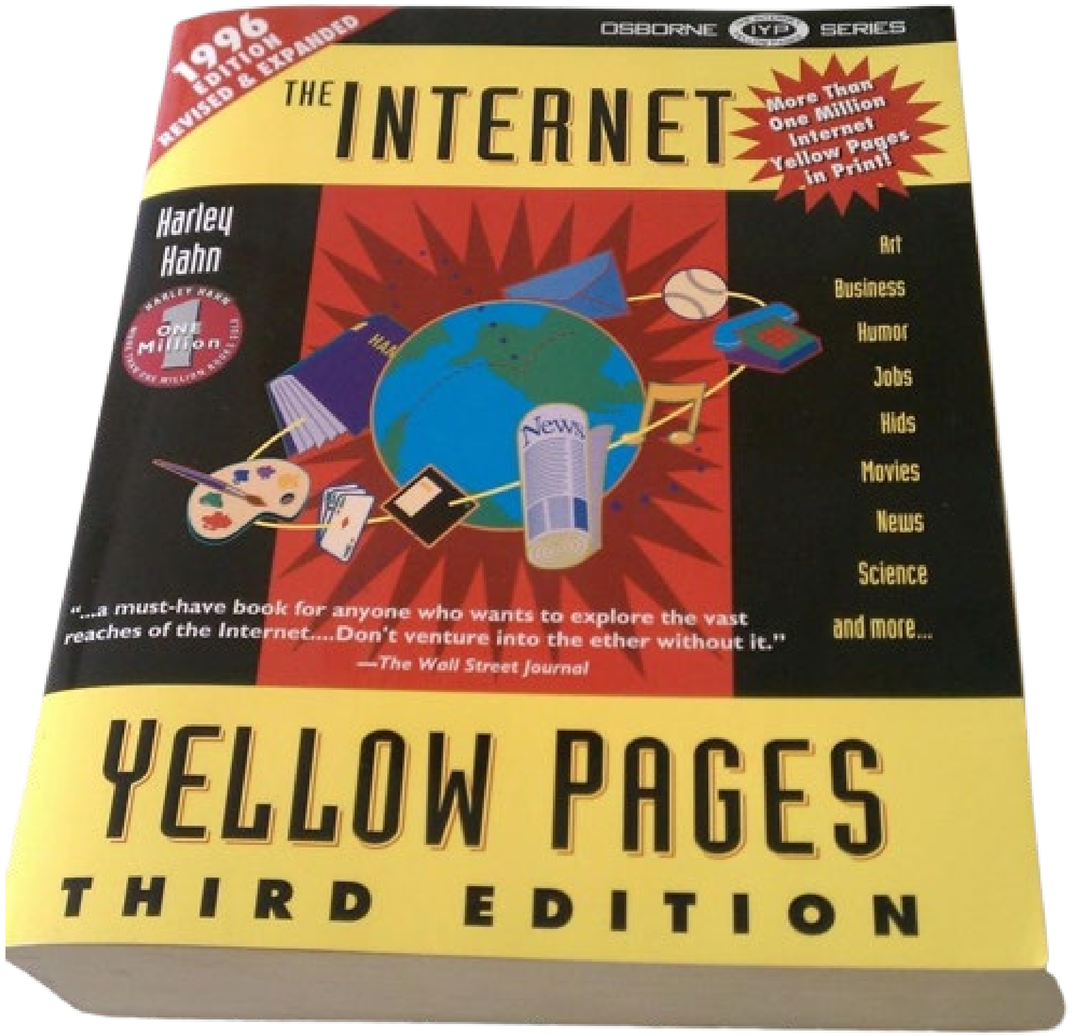

NCSA Mosaic for MS Windows
File Edit Options Navigate Hotlist Annotate Help
Document Title: NCSA Mosaic Home Page
Document URL: http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html
N C S A
MOSAIC
X Window System • Microsoft Windows • Macintosh
Welcome to NCSA Mosaic, an Internet information browser and World Wide Web client. NCSA Mosaic was developed at the National Center for Supercomputing Applications at the University of Illinois in --> Urbana-Champaign. NCSA Mosaic software is copyrighted by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI.
Jan '97
The Software Development Group at NCSA has worked on NCSA Mosaic for nearly four years and we've learned a lot in the process. We are honored that we were able to help bring this technology to the masses and appreciated all the support and feedback we have received in return. However, the time has come for us to concentrate our limited resources in other areas of interest and development on Mosaic is complete.
All information about the Mosaic project is available from the homepages.
NCSA Mosaic Platforms:
● NCSA Mosaic for the X Window System
● NCSA Mosaic for the Apple Macintosh
● NCSA Mosaic for Microsoft Windows
World Wide Web Resources The following resources are available to help introduce you to cyberspace and keep track of its growth:
● A glossary of World Wide Web terms and acronyms
● An INDEX to Mosaic related documents
● NCSA Mosaic Access Page for persons with disabilities
● Mosaic and WWW related Tutorials
● Internet Resources Meta-Index at NCSA
NUM

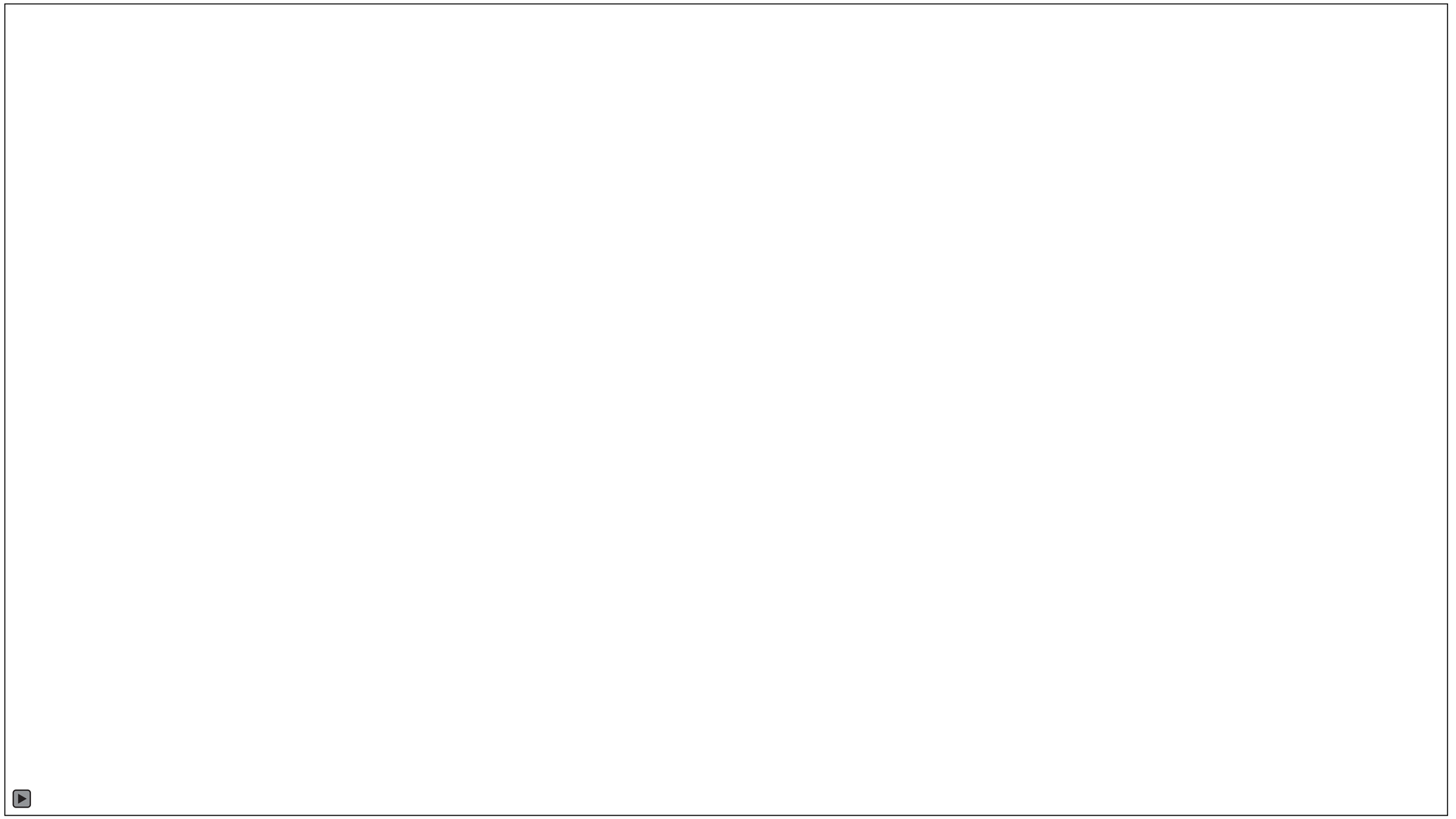
Founded in 1995

World’s Largest Digital Agency Network

The Year
“2 BG”

The Year “2 BG”


1996 EDITION REVISED & EXPANDED
OSBORNE SERIES
THE INTERNET
More Than One Million Internet Yellow Pages in Print!
Harley Hahn
ONE Million
Art
Business
Humor
Jobs
Kids
Movies
News
Science
and more...
"...a must-have book for anyone who wants to explore the vast reaches of the Internet....Don't venture into the ether without it."
—The Wall Street Journal
YELLOW PAGES
THIRD EDITION

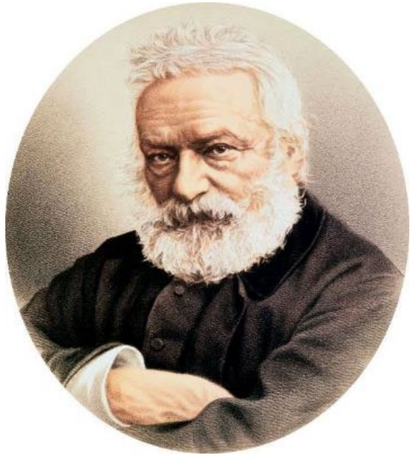


The Internet Gave Birth to a Revolution

The Internet Gave Birth to a Revolution

“A revolution is seldom recognized in its time”

Victor Hugo





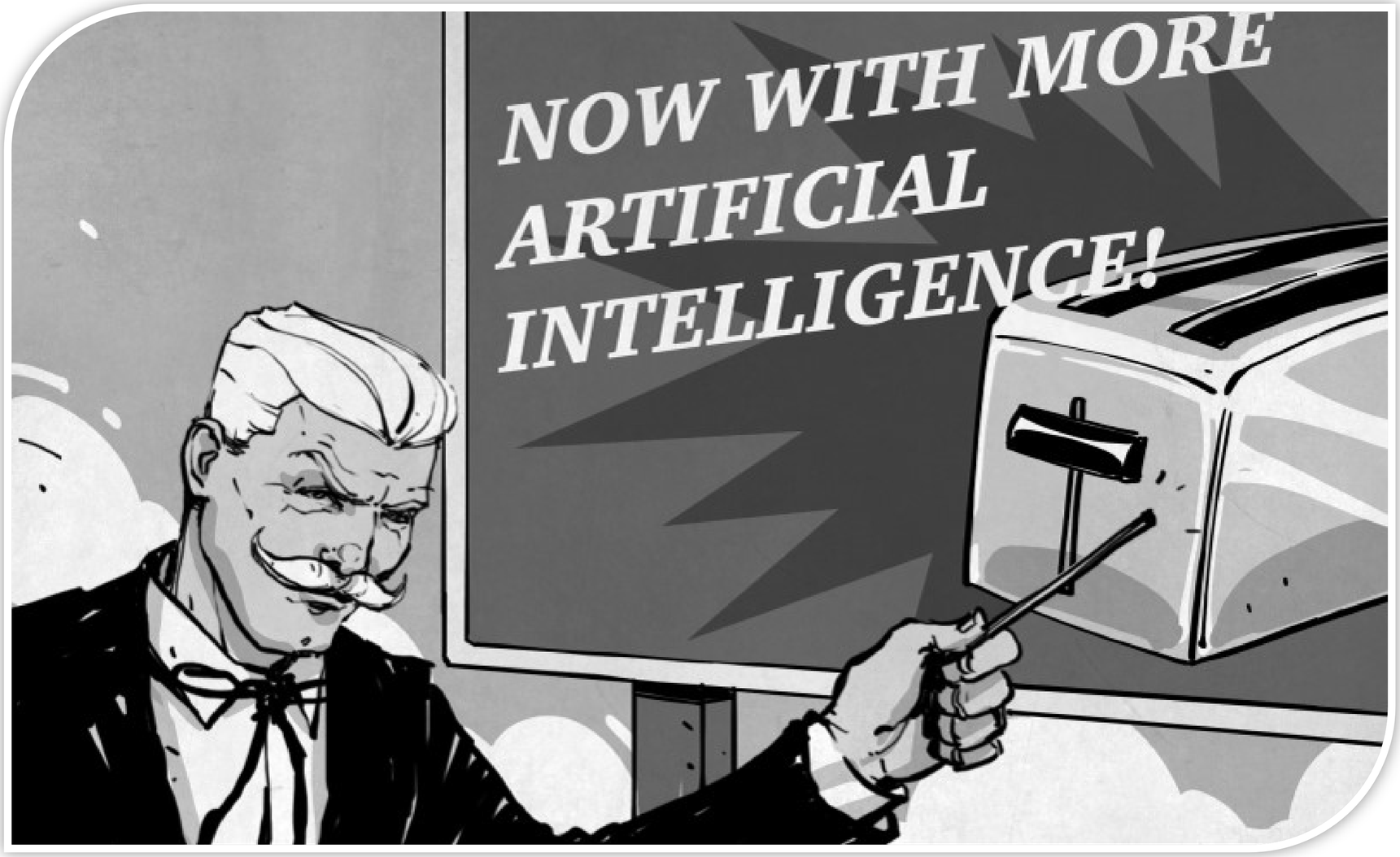
What Thought Leaders Are Saying



*"AI is one of the most important things humanity is working on. It could be more profound than **electricity or fire**."*
Sundar Pichai *(Source: Fortune)*

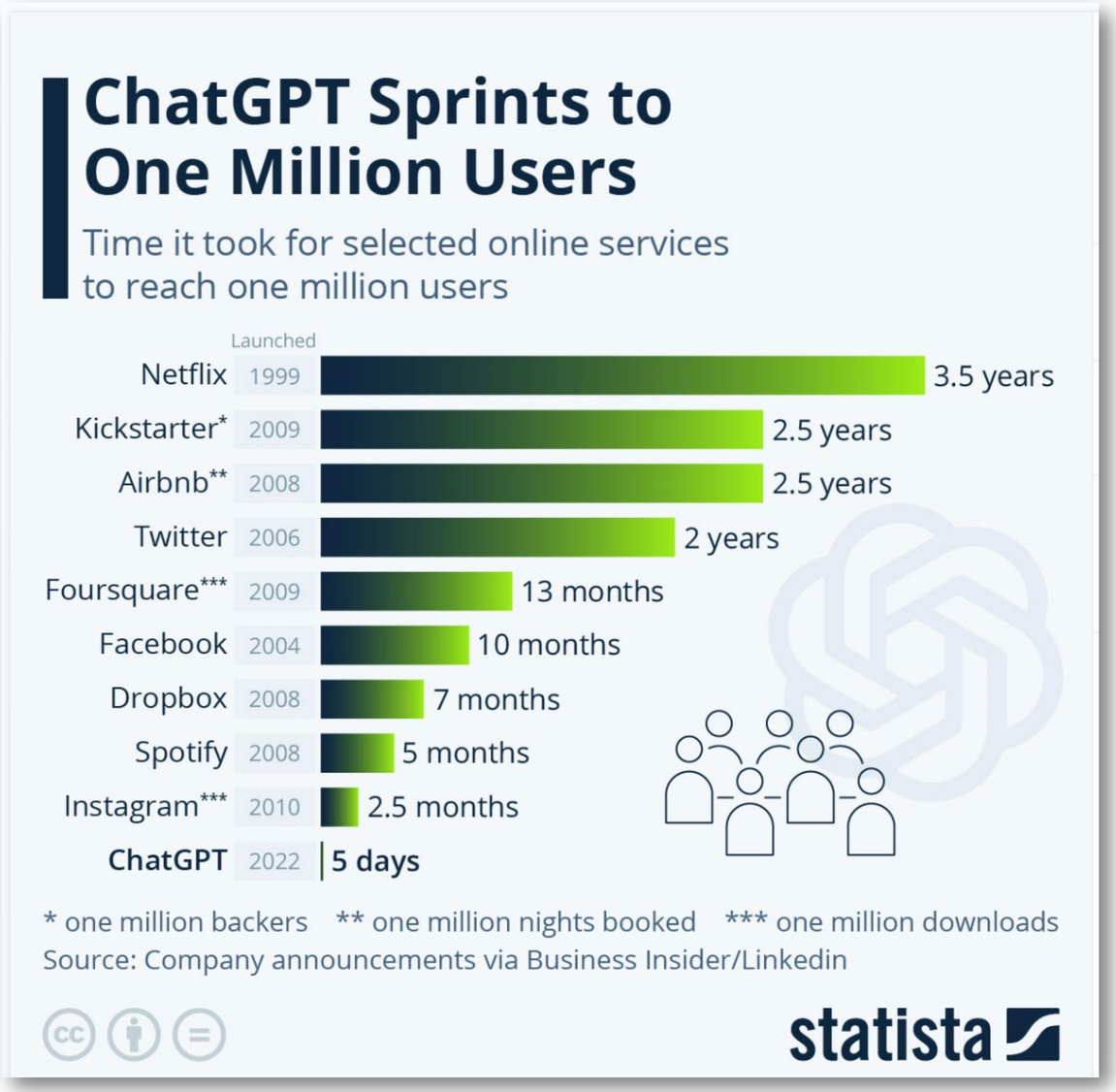


*"AI is the most revolutionary technology in decades–as fundamental as the invention of the **microchip and the internet**."*
Bill Gates *(Source: WSJ)*


NOW WITH MORE ARTIFICIAL INTELLIGENCE!

November 30th, 2022 – The World Changed





November 30, 2022
Launch of ChatGPT

Dawn of a New Era

The
“Democratization of AI”



Traditional AI – Big Corporations and Governments

- Large data sets and compute power
- ML - trains itself & improves over time
- Identifies patterns and makes predictions



Traditional AI – Big Corporations and Governments

- Large data sets and compute power
- ML - trains itself & improves over time
- Identifies patterns and makes predictions
  - Suggesting products (Amazon) or content (Facebook)
  - Medicine – i.e. radiology (tumor detection)
  - Fraud detection
  - Credit scoring
  - Predictive Policing

And Then Something Happened…

2017

Researchers from Google published a paper that would change the world!



Attention Is All You Need

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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 41.8 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.

*Equal contribution. Listing order is random. Jakob proposed replacing RNNs with self-attention and started the effort to evaluate this idea. Ashish, with Illia, designed and implemented the first Transformer models and has been crucially involved in every aspect of this work. Noam proposed scaled dot-product attention, multi-head attention and the parameter-free position representation and became the other person involved in nearly every detail. Niki designed, implemented, tuned and evaluated countless model variants in our original codebase and tensor2tensor. Llion also experimented with novel model variants, was responsible for our initial codebase, and efficient inference and visualizations. Lukasz and Aidan spent countless long days designing various parts of and implementing tensor2tensor, replacing our earlier codebase, greatly improving results and massively accelerating our research.

†Work performed while at Google Brain.

‡Work performed while at Google Research.

31st Conference on Neural Information Processing Systems (NIPS 2017), Long Beach, CA, USA.

1938

Otto Hahn and Fritz Strassmann discover fission



Revealed to the World

- ChatGPT – November 30th (GPT 3.5)
- Trained on 300 billion words i.e. Wikipedia, books, the web

OpenAI
ChatGPT

Revealed to the World

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- How was it different?
  - Human-like capability to generate new creations

OpenAI
ChatGPT

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  - New way to access information

OpenAI
ChatGPT

Revealed to the World

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  - New way to access information



What's Possible with Generative AI

- **Text:** ChatGPT, Claude.ai, pi.ai
- **Images:** Dall-E 3, Midjourney, Firefly
- **Speech synthesis:** Eleven Labs
- **Coding:** Copilot (replacing 5 coders with 1)
- **Video:** Synthesia, Hourone.ai, RunwayML
- **Music:** Google (MusicLM)









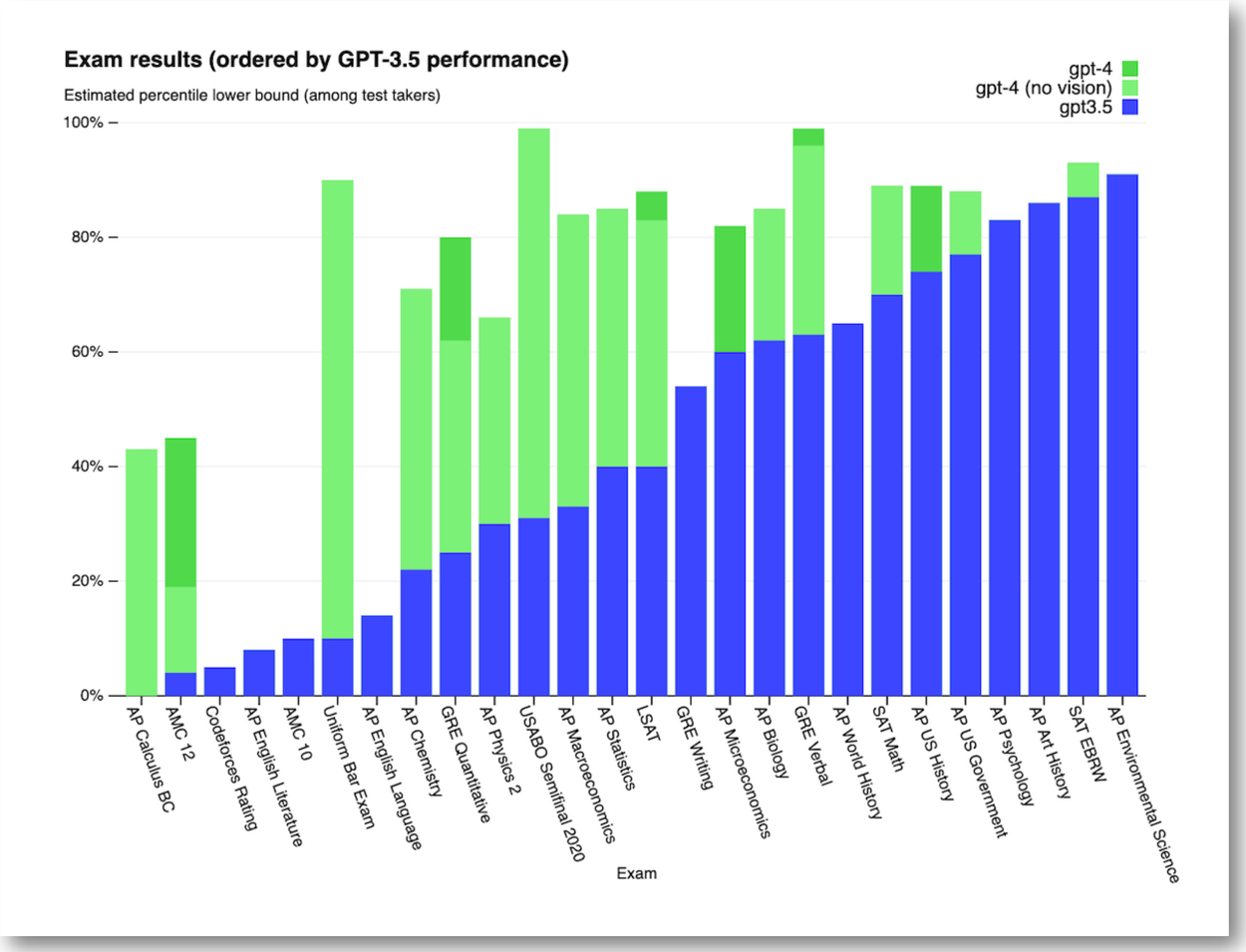


BNI

WSI

Speed of Development: GPT-4

- GPT-4 released on March 13th
  - (10X more powerful in 3½ months!)
- 10% to 90% on Bar Exam

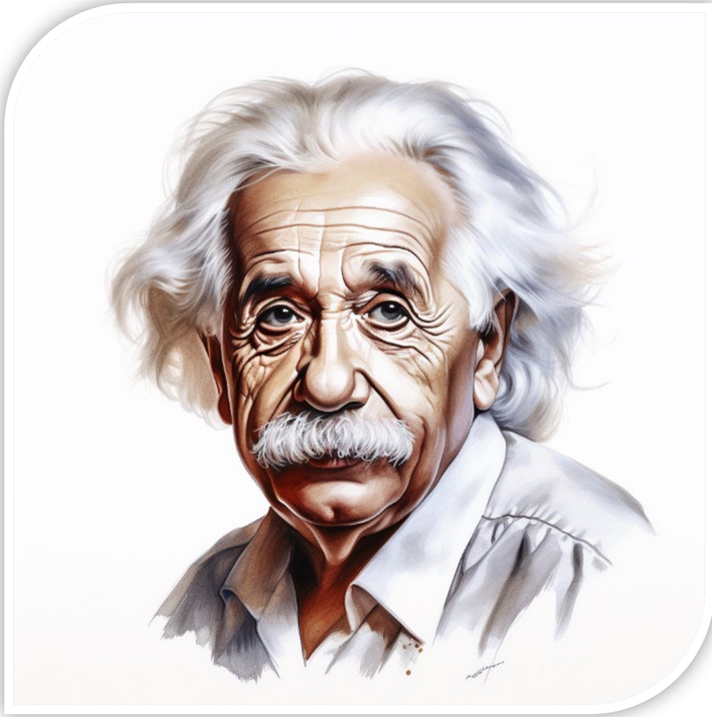


Current IQ of AI

- Today’s ChatGPT has IQ of 155 (10 X smarter than GPT 3.5)

Close to Einstein

160 IQ



Current IQ of AI

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Close to Einstein

160 IQ



“ChatGPT could have an IQ of 1600 within the next year” - Mo Gawdat – Google X

What Does This Mean For Business?

- First time ever we can scale knowledge work!
- What would you do with a team of free college grads?
  - Law graduate
  - MBA graduate
  - Medical student



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*The ability to have unlimited free interns and analysts provides us with **superpowers!***

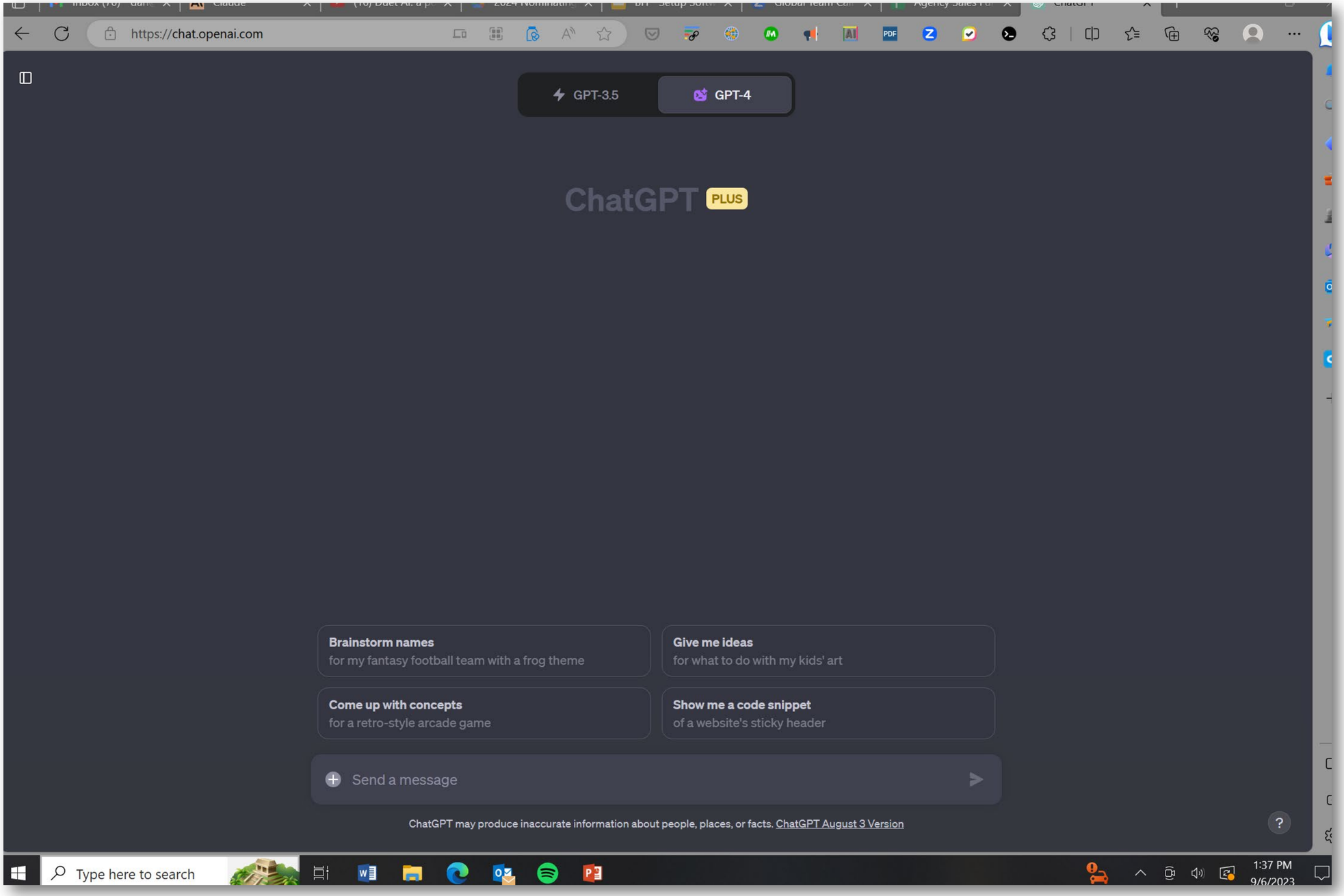
Discover Your New Superpowers



Let’s Look at Some Use Cases!



ChatGPT – chat.openai.com


https://chat.openai.com
GPT-3.5
GPT-4
ChatGPT
PLUS
Brainstorm names
for my fantasy football team with a frog theme
Give me ideas
for what to do with my kids' art
Come up with concepts
for a retro-style arcade game
Show me a code snippet
of a website's sticky header
Send a message
ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version
Type here to search
1:37 PM
9/6/2023

AI as Copywriter/Scribe - HR

AI as Copywriter/Scribe



AI for Ideation

(i.e. naming company product, campaign etc.)

AI for Ideation

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AI for Ideation

(i.e. naming company product, campaign etc.)

Create a list of possible company names for a sustainable eco-friendly clothing brand that specializes in organic materials and ethical manufacturing

AI for Ideation

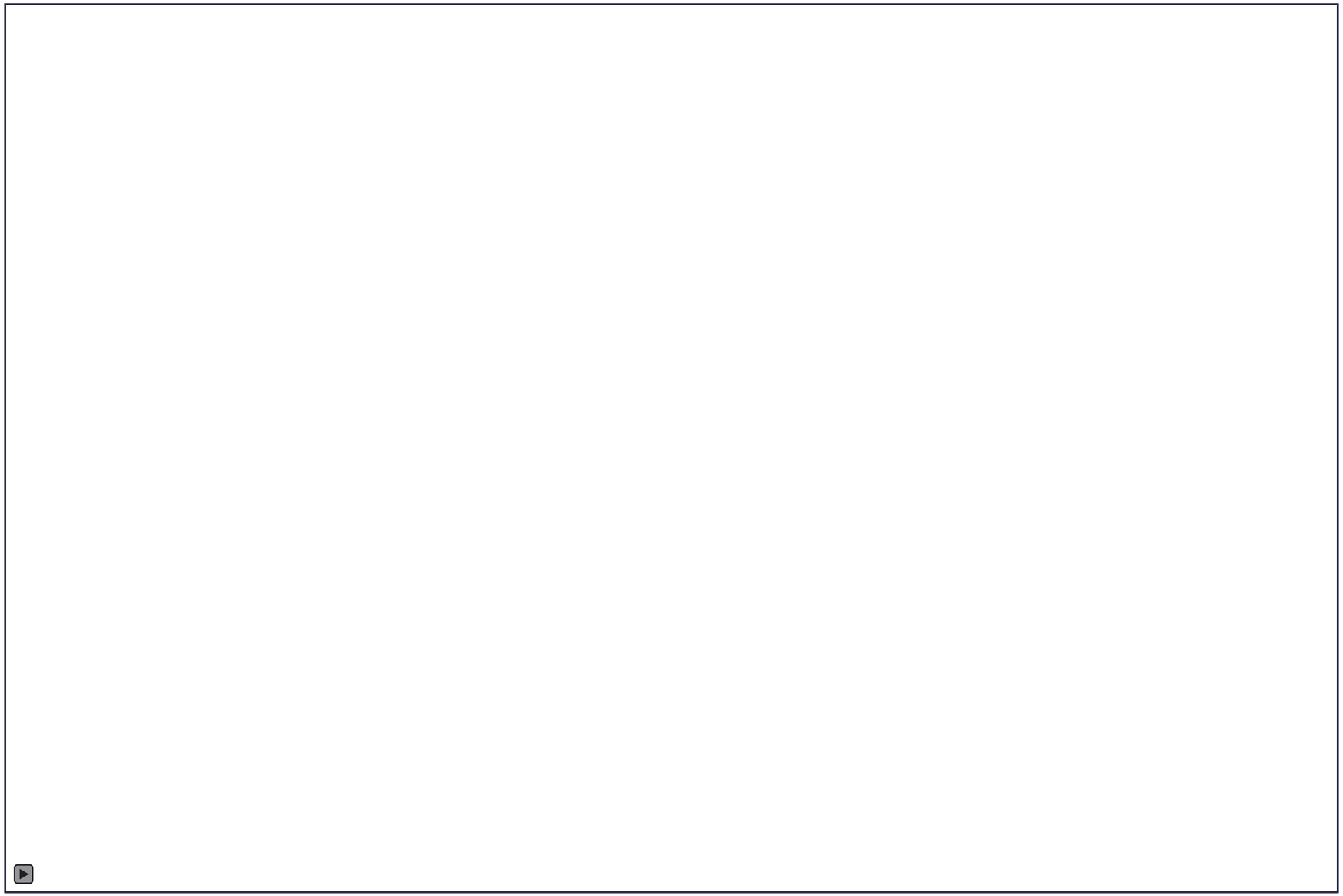
(i.e. naming company product, campaign etc.)



AI as Marketing Intern

- Using customer feedback to train ChatGPT (voice of the customer)
  - Summarize customer feedback

AI as Marketing Intern – Analyze Customer Feedback



AI as Marketing Intern – Write Facebook Ads

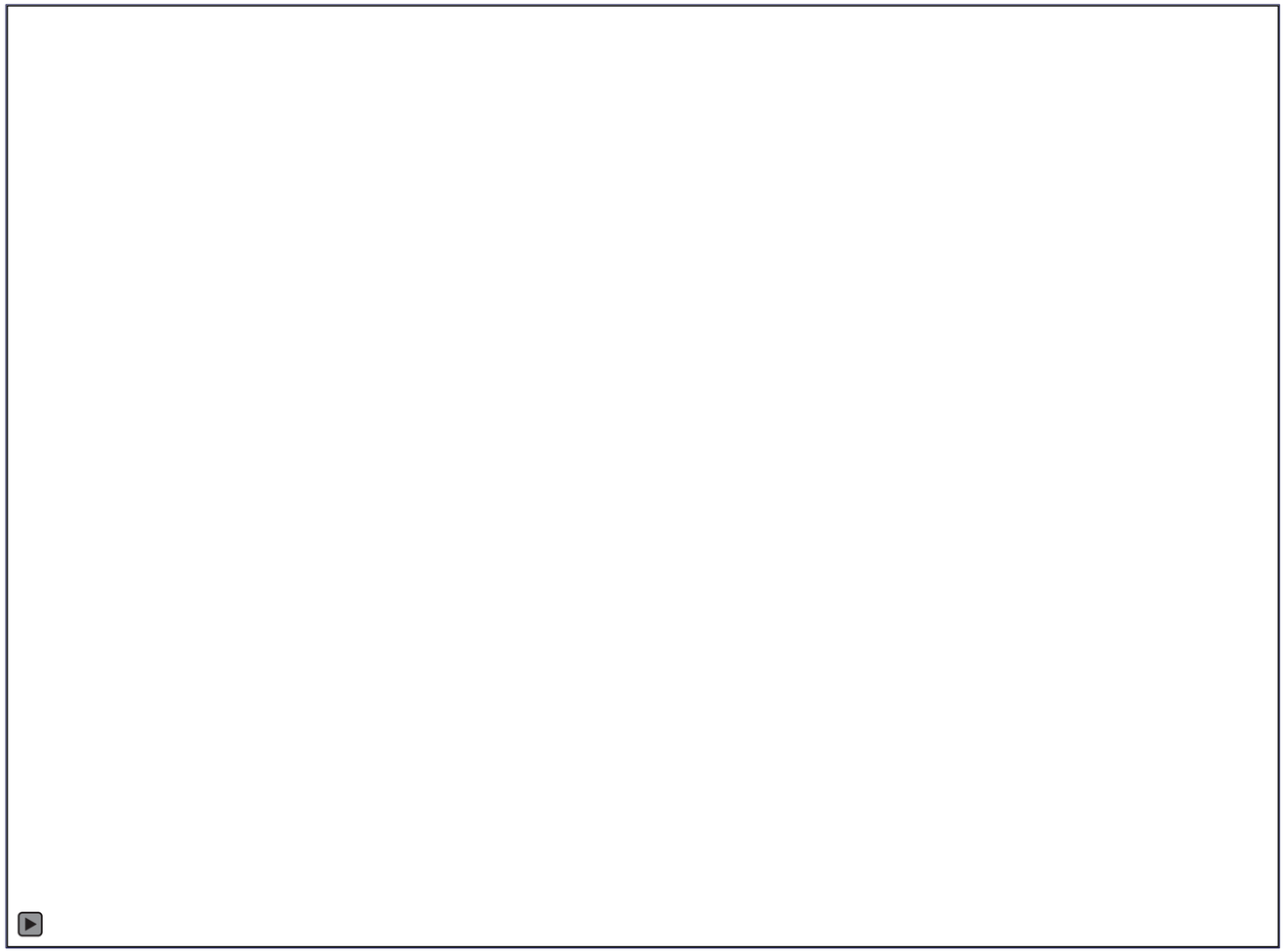


AI to Accelerate Your Learning

- Book summaries

AI to Accelerate Your Learning

- Book summaries



AI to Accelerate Your Learning

- Book summaries
- Summarize YouTube videos



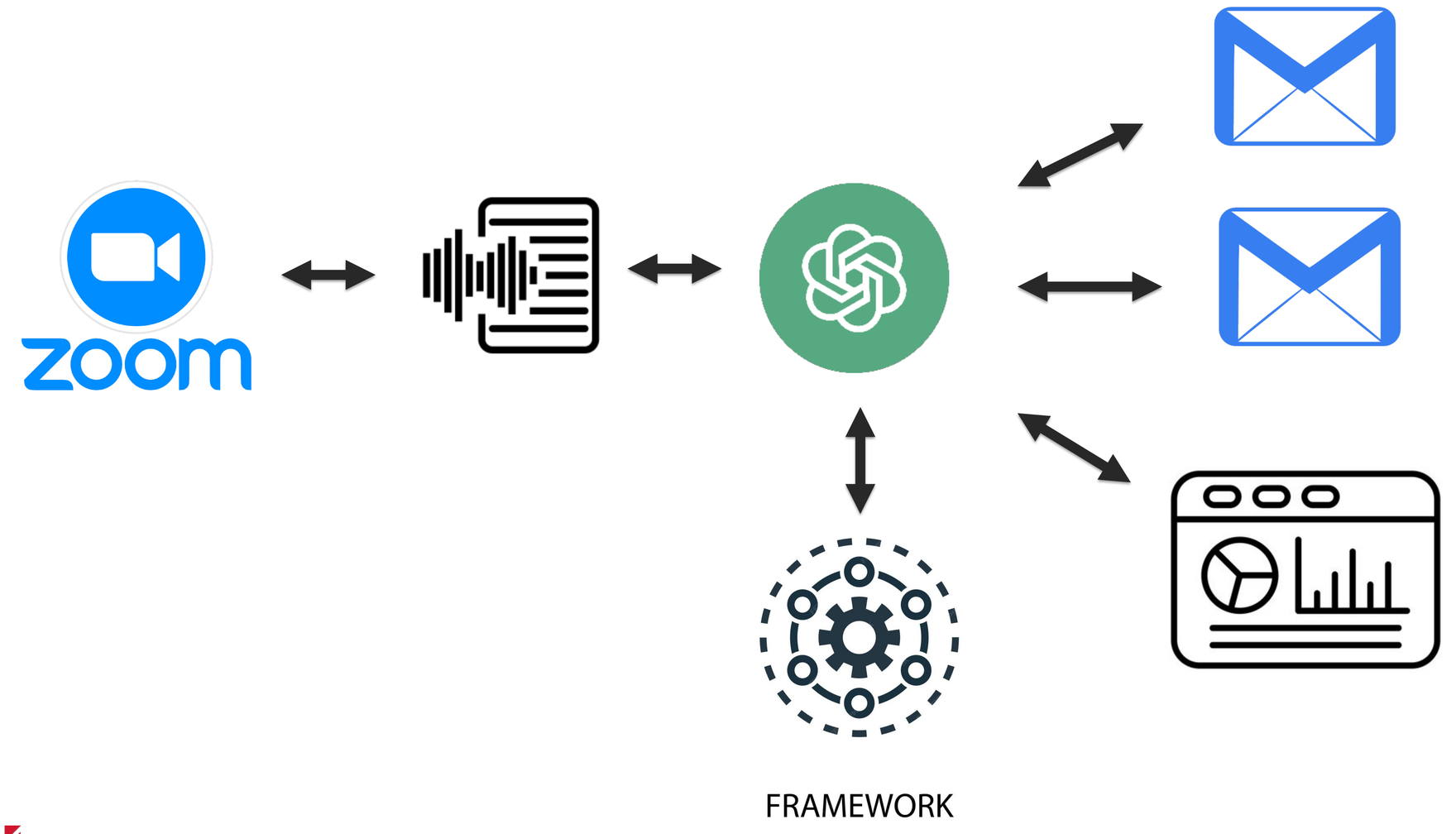
How to Get Your Brain to Focus | Chris Bailey | TEDxManchester

TEDx Talks 14M views

The latest research is clear: the state of our attention determines the state of our lives. So how do we harness our attention to focus...



AI as Sales Manager/Coach



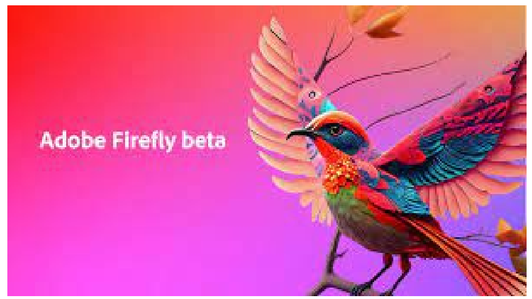


AI as Graphic Designer

DALL·E 2

Dall-E 2 (Open AI)

Midjourney



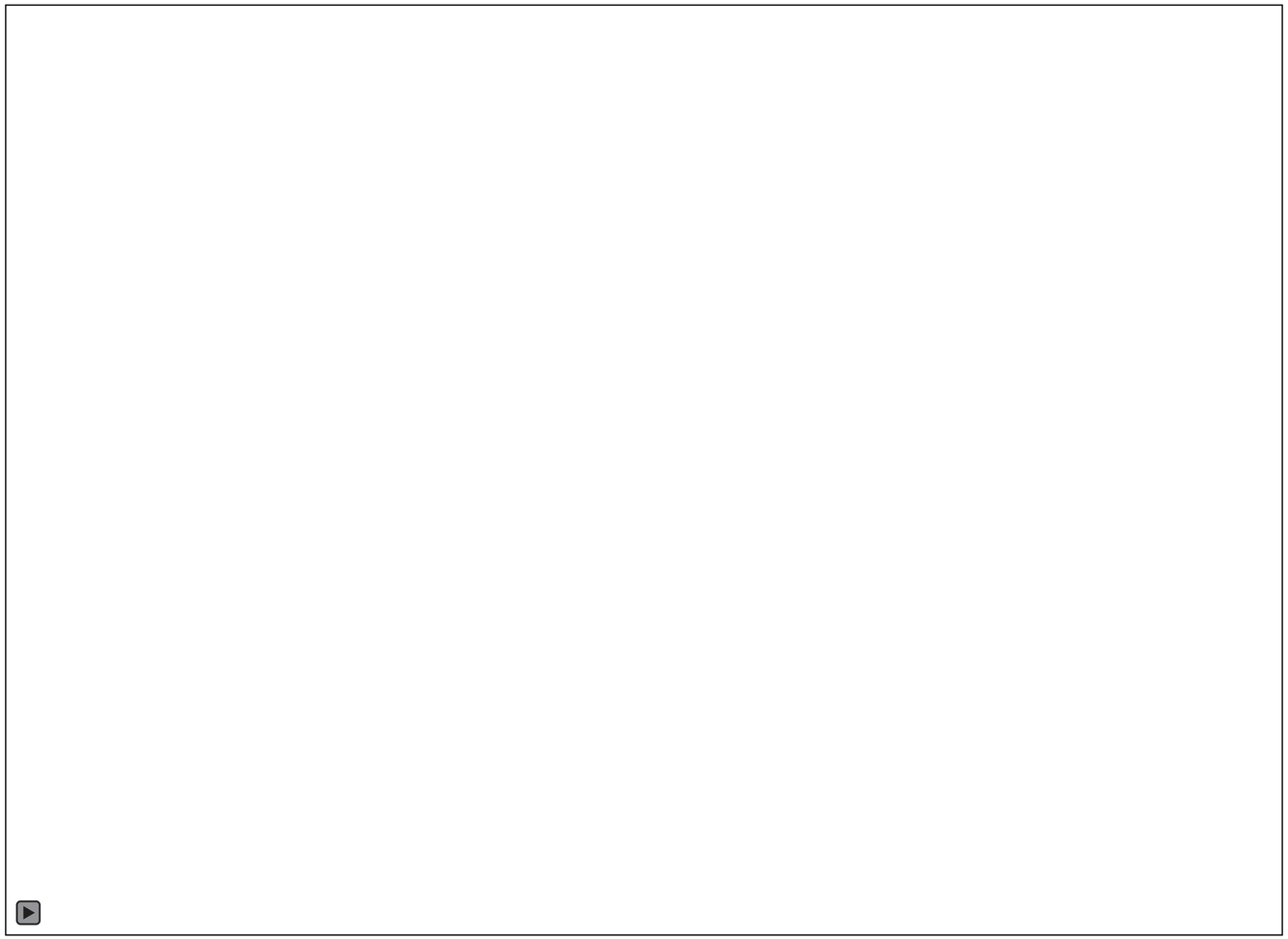
Adobe Firefly

Dall-E 2

labs.openai.com



Dall-E 2



Dall-E 2



Speed to Lead

- Contact rate – quality of leads and effort
  - How do you define contact? (i.e. voice contact vs. message left)
  - Depends on lead source
  - How many attempts? 6 attempts in 14 days
- Speed to lead
  - 4 Hours (82.4% of sales were contacted within 4 hours)
  - 100% of leads followed up in less than 180 minutes
  - *Multiple vendors calling each lead*



Midjourney

midjourney.com



Midjourney.com





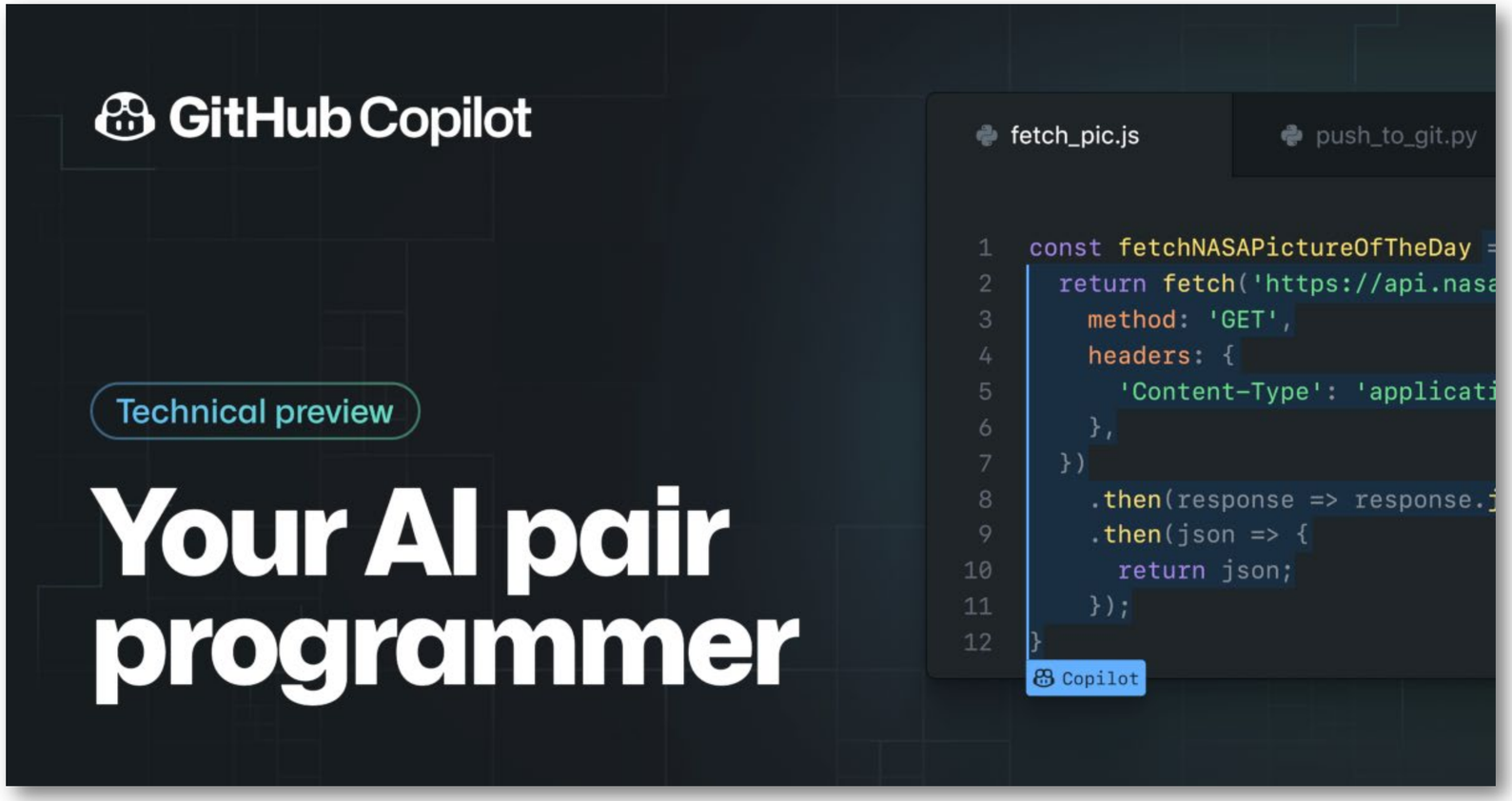


Speed of Development (Midjourney)



- Version 3, July 25, 2022
- Version 4, Nov 5, 2022
- Version 5, Mar 15, 2023

AI as Programmer



Today, 41% of all code on GitHub is generated with AI.
Coders using AI are 58% more effective.

AI as Videographer

- Video avatars (i.e. training, customer explainer videos etc.)
  - Not person dependent
  - Easily updatable
  - Fast efficient production
    - (no cameras, video sessions, etc.)

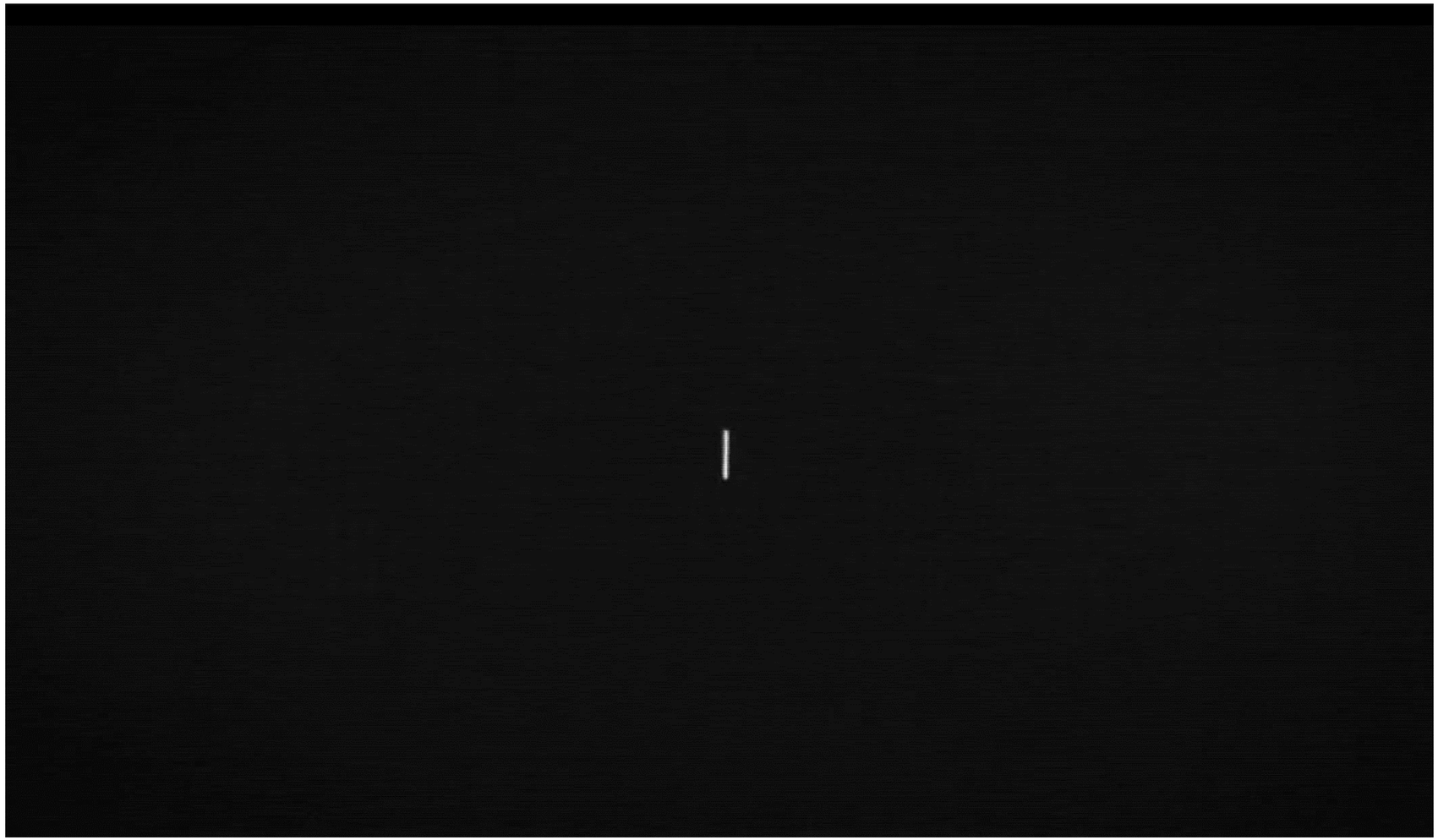
synthesia





AI as Videographer – Runway ML (June 7)

AI as Videographer – Runway ML (June 7)



How Hard is Writing Prompts?

How Hard is Writing Prompts?



“The hottest new programming language in 2023 is English.”

Andrej Karpathy (Former) Director of AI at Tesla, OpenAI, PhD

How Hard is Writing Prompts?

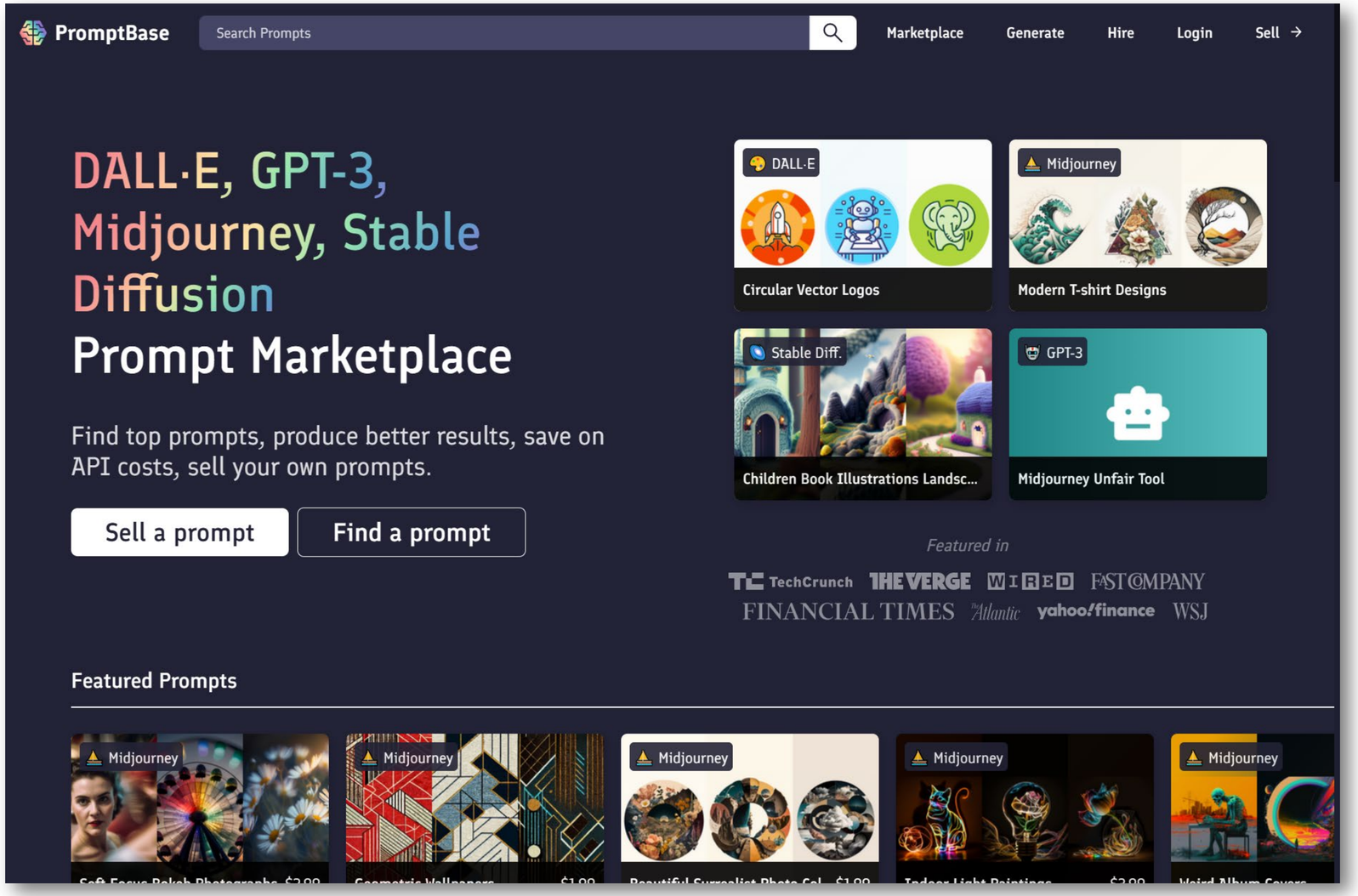


“The hottest new programming language in 2023 is English.”

Andrej Karpathy (Former) Director of AI at Tesla, OpenAI, PhD

- Prompt Engineer – new job title?
  - ChatGPT is already replacing it!
  - Prompt marketplaces – images, code etc.

PromptBase


PromptBase
Search Prompts
Marketplace
Generate
Hire
Login
Sell
DALL·E, GPT-3, Midjourney, Stable Diffusion
Prompt Marketplace
Find top prompts, produce better results, save on API costs, sell your own prompts.
Sell a prompt
Find a prompt
DALL·E
Circular Vector Logos
Midjourney
Modern T-shirt Designs
Stable Diff.
Children Book Illustrations Landsc...
GPT-3
Midjourney Unfair Tool
Featured in
TechCrunch
THE VERGE
WIRED
FAST COMPANY
FINANCIAL TIMES
The Atlantic
yahoo!finance
WSJ
Featured Prompts
Midjourney
Midjourney
Midjourney
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Midjourney

AI as Your Personal Assistant

Auto-GPT

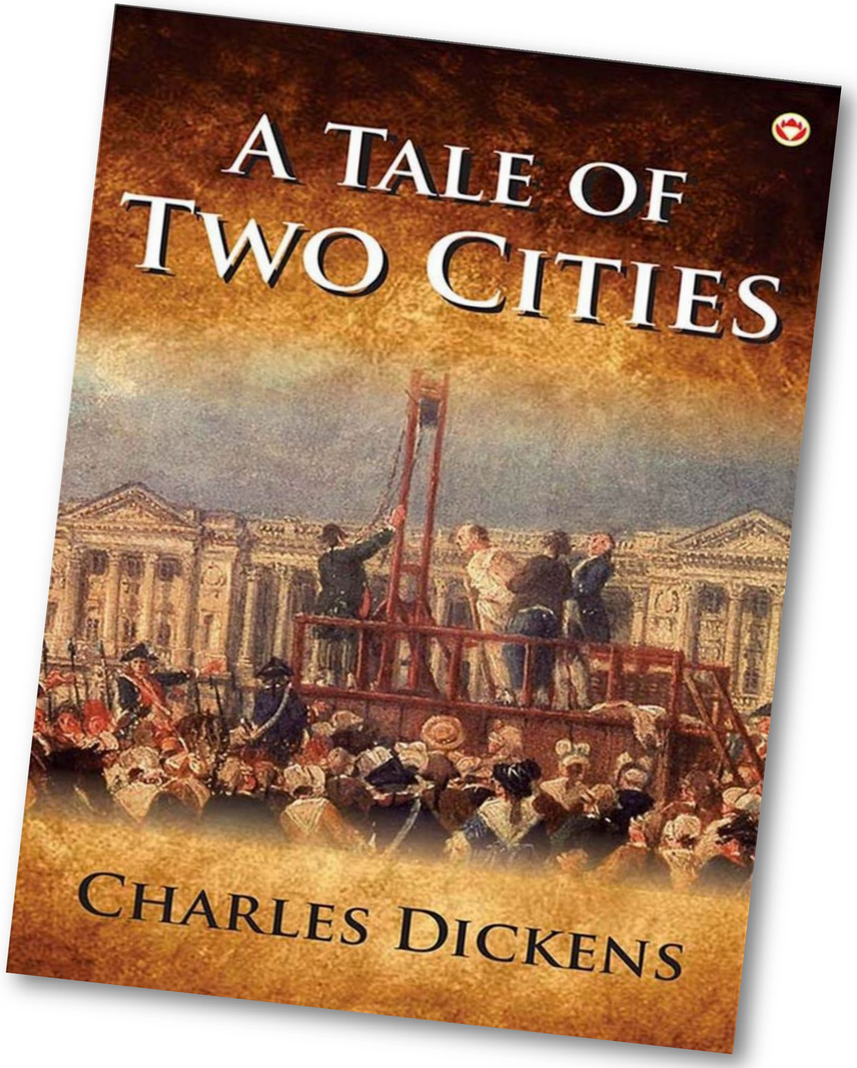
- An AI chatbot vs. an AI assistant
- Commands a team of AI chatbots



“So what does all of this mean?”

A Regime Change Moment

"It was the best of times, it was the worst of times…"



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Artificial Intelligence | Cryptocurrency | Metaverse | Cybersecurity | Tech Forward

TECH · A.I.

The economist who predicted that A.I. would replace half of all U.S. jobs now says ChatGPT is the equivalent of Uber disrupting the taxi industry—and it could lead to lower wages

Bloomberg

Live Now Markets Economics Industries Technology Politics Wealth Pursuits Op

Technology + Work Shift

ChatGPT Will Lead to Layoffs, But Traders Say They Will Be Fine

FORBES > LEADERSHIP > CAREERS

EDITORS' PICK

Goldman Sachs Predicts 300 Million Jobs Will Be Lost Or Degraded By Artificial Intelligence

Jack Kelly Senior Contributor

I write actionable interview, career and salary advice.

Follow

Forbes

FORBES > INNOVATION > ENTERPRISE TECH

What Does ChatGPT Really Mean For Your Job?

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'AI will take 20% of all jobs within five YEARS': Experts explain how bots like ChatGPT will dominate the labor market

- AI-powered chatbots like ChatGPT are starting a new era of technology
- It can write poems, take exams and is even set to defend a human in court
- While life-changing, some fear this AI and others will take over the job market
- Experts told DailyMail.com that ChatGPT could replace 20% of the workforce

abc NEWS VIDEO LIVE SHOWS

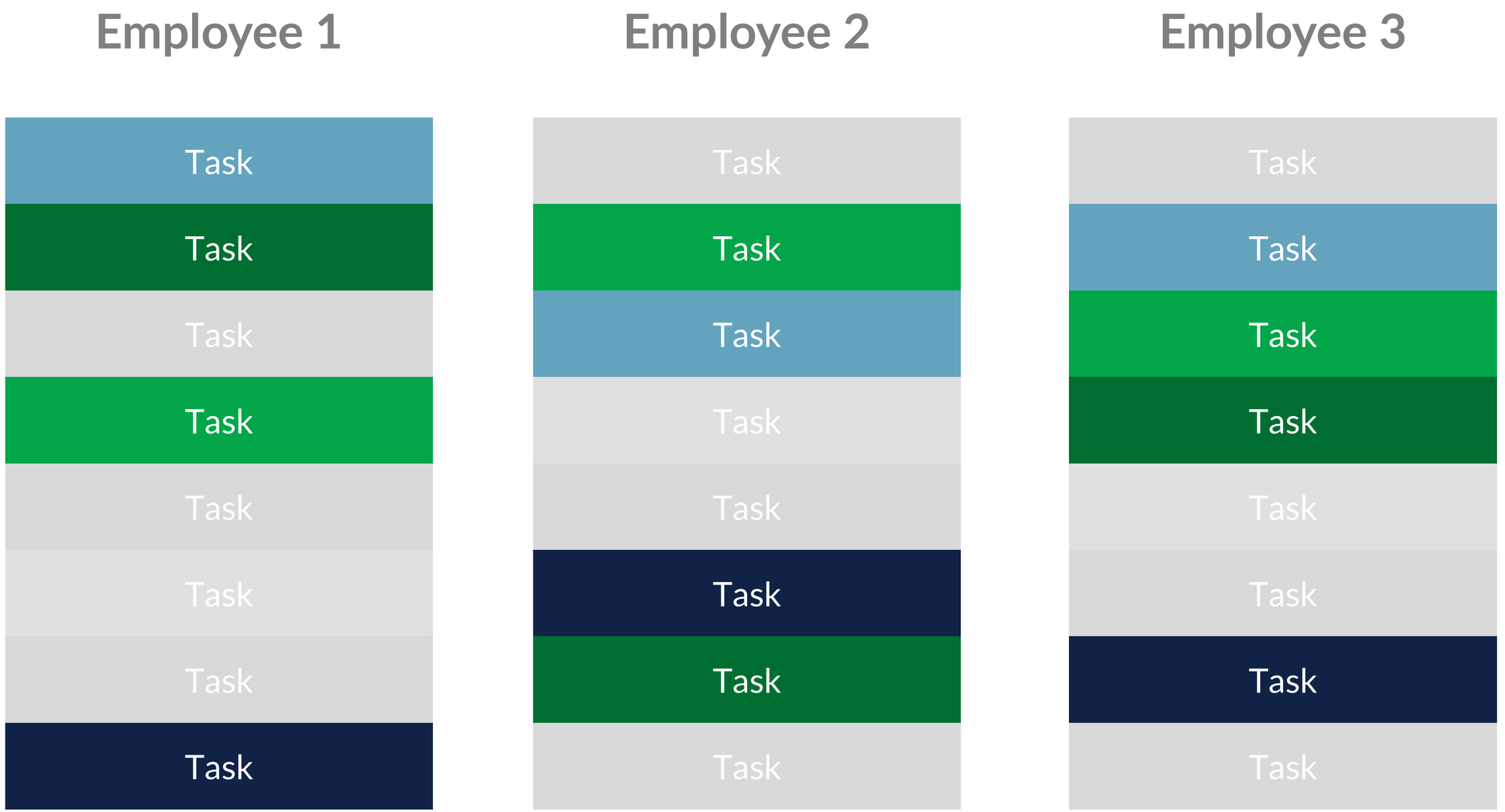
Is AI coming for your job? ChatGPT renews fears

BNI

WSJ

Will AI Replace Employees?

- AI will replace tasks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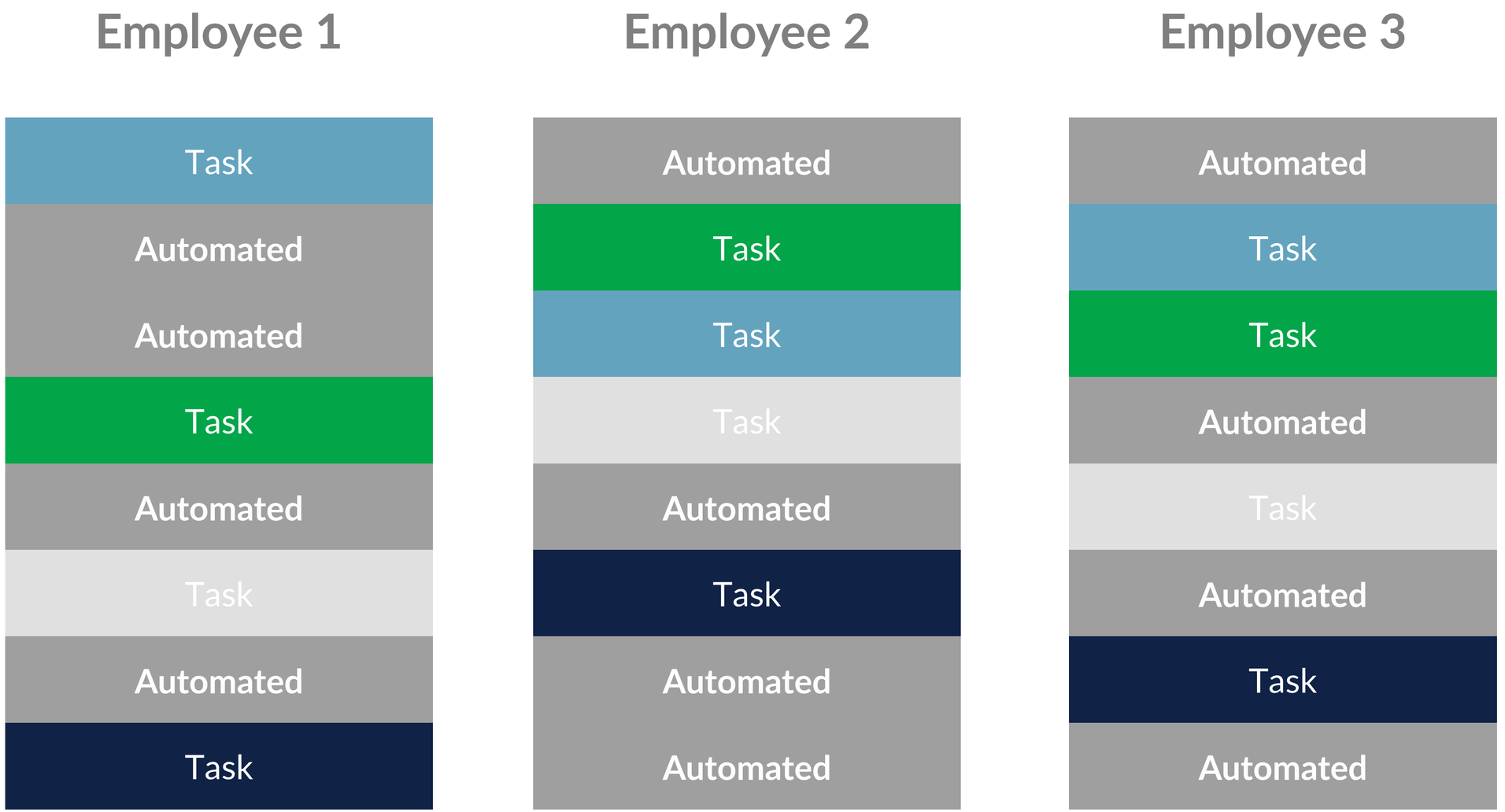
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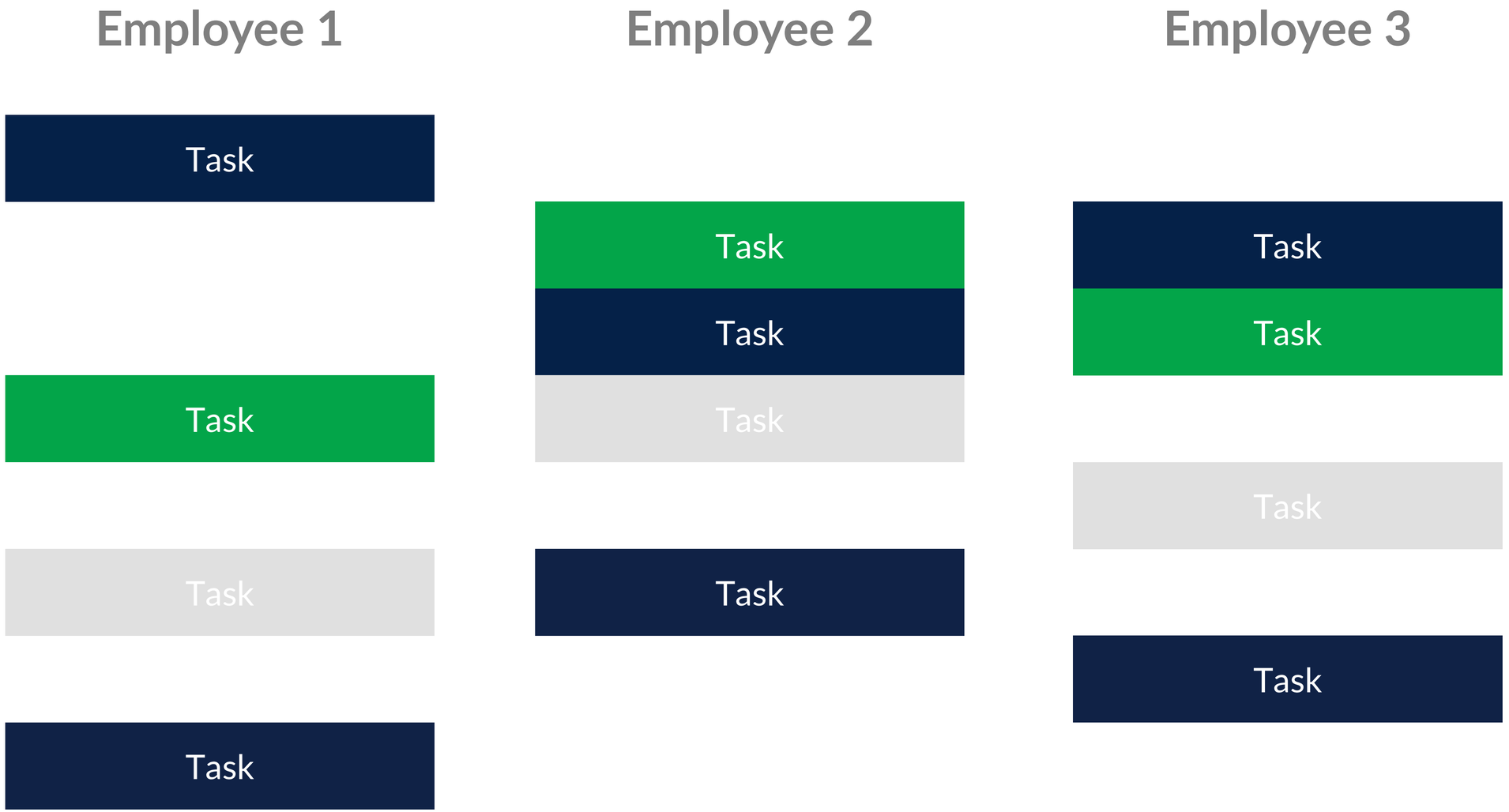
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Employee 1
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Task
Employee 2
This Role No Longer Required
Employee 3
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Task

How will you use this new efficiency?

- Reduce staff, increase profitability
- Reduce staff, reinvest into the business
- Maintain staffing and build/move faster

How will you use this new efficiency?

- Reduce staff, increase profitability
- Reduce staff, reinvest into the business
- Maintain staffing and build/move faster
- New category of investors emerging
  - AI Arbitrage



What are the labor costs in your business?

- White collar – professional services?
  - 50% labor cost?
- Service
  - 40 to 50%?
- Retail/Food
  - 30%?

What are the labor costs in your business?

- Imagine a white-collar consulting business
- Could AI replace consultants?



BCG BOSTON CONSULTING GROUP

What are the labor costs in your business?

- How did ChatGPT compare to the consultants?
  - 12.1% faster
  - 25.2% more work
  - *40% better quality of work!*

Digital Marketing Agency

- 50% labor cost
  - Selling strategy, consulting, ideation, innovation etc.
  - Labor is #1 cost!
- 20% net margin



Digital Marketing Agency

- 50% labor cost
  - Selling strategy, consulting, ideation, innovation etc.
  - Labor is #1 cost!
- 20% net margin







“The AI Enabled Agency”



“The AI Enabled Agency”

WSI

Profit - 20% + 50%



BNI

WSI

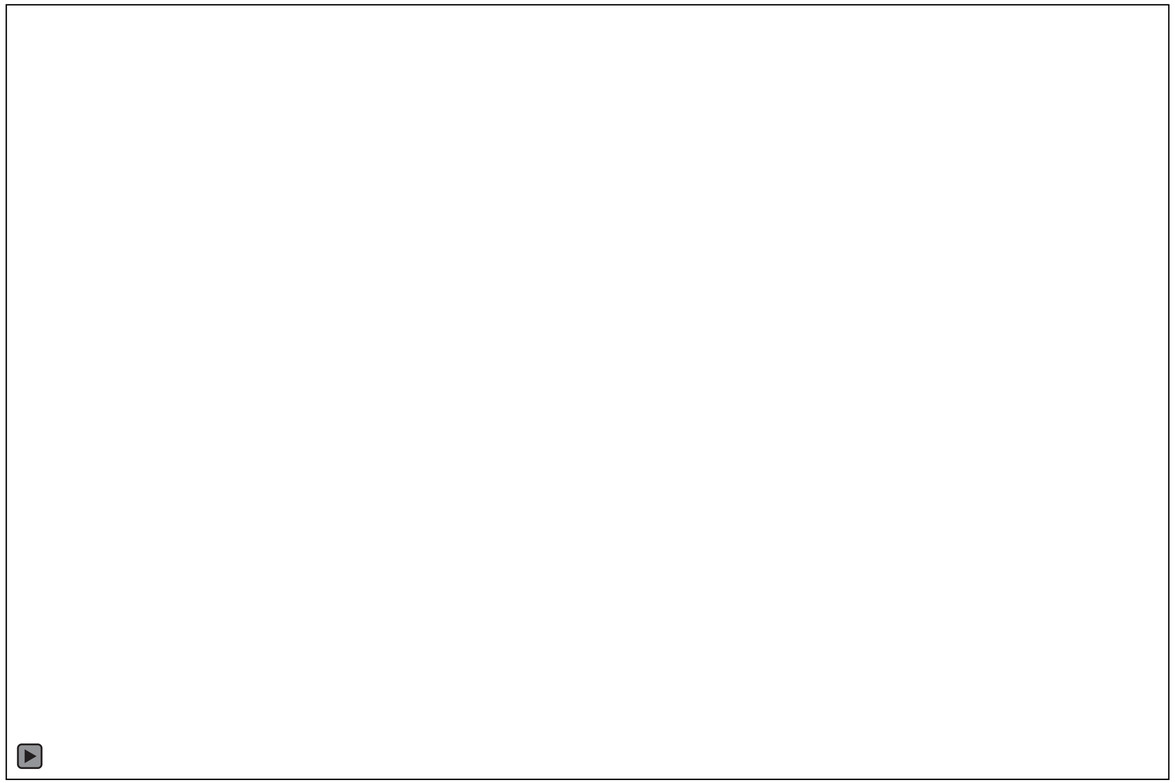
My Business Isn’t White Collar

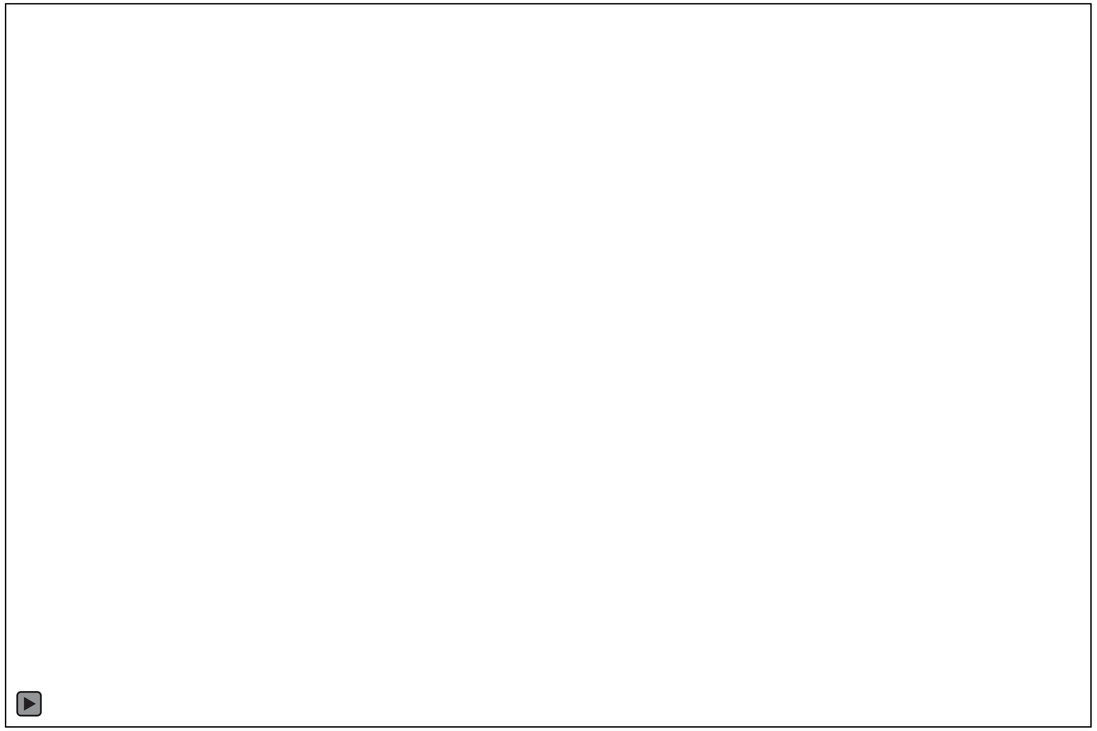
My Business Isn’t White Collar



My Business Isn’t White Collar

When AI meets Robotics





Do we see things just as they are?

Do we see things just as they are?



Or as they could be?




UBBR

$1,000,000 in value vanishes!



Will we need to own a car?



25 million professional drivers?

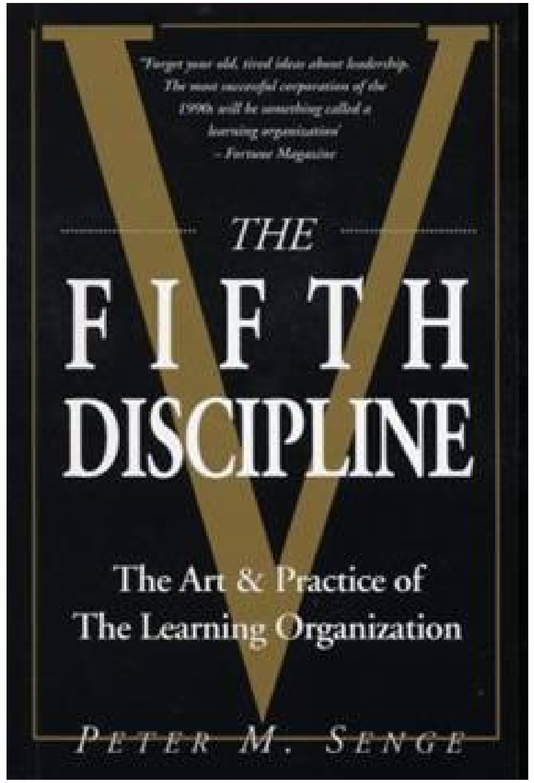




What will disruption look like?



No Stopping Progress



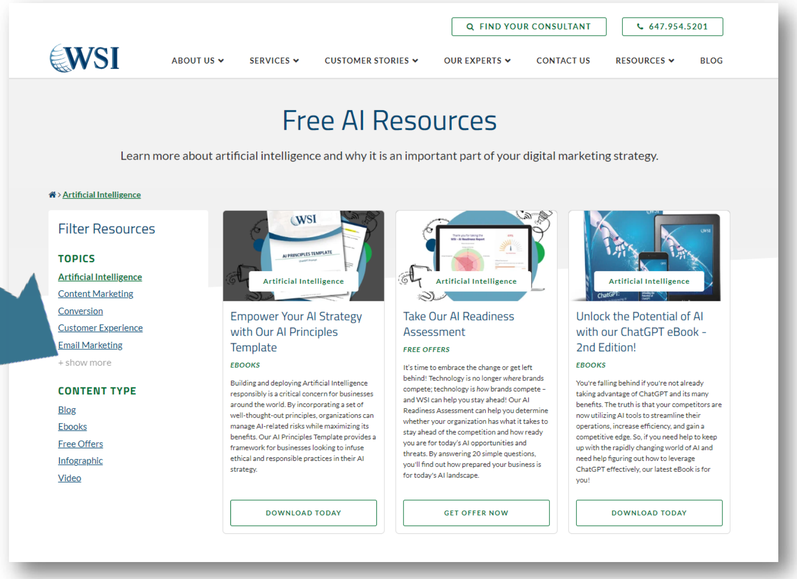
"The only sustainable competitive advantage is the speed at which we learn"

Peter Senge

In Closing

- Visit AIbyWSI.com to access our AI resources







Embrace Digital. Stay Human.

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