

Artificial Intelligence and the future of human work, learning and training

Gerd Leonhard, Futurist



@gleonhard



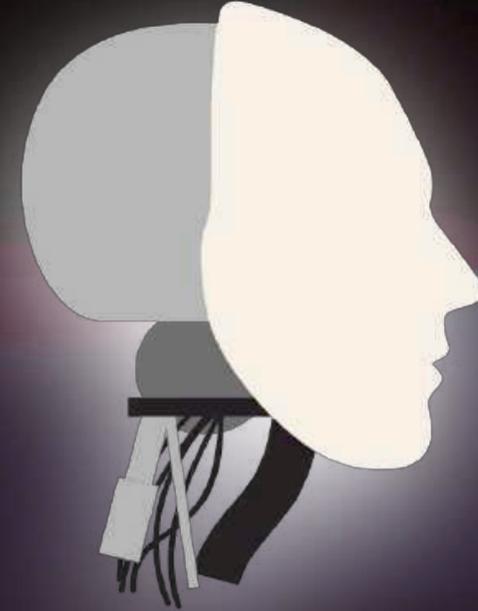
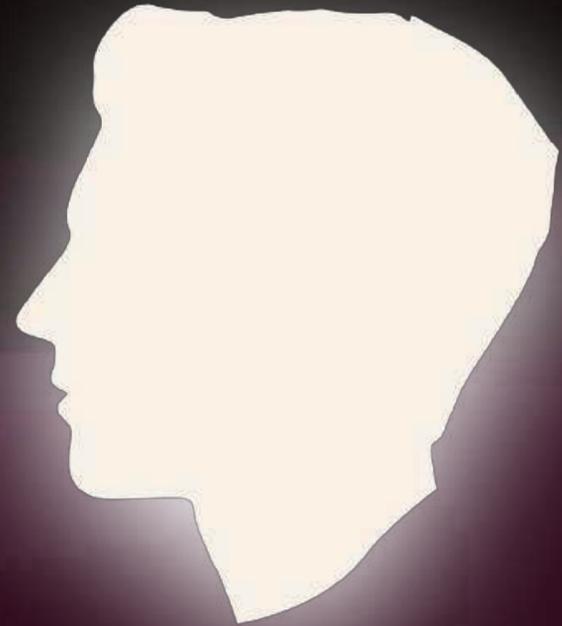
gerdtube.com



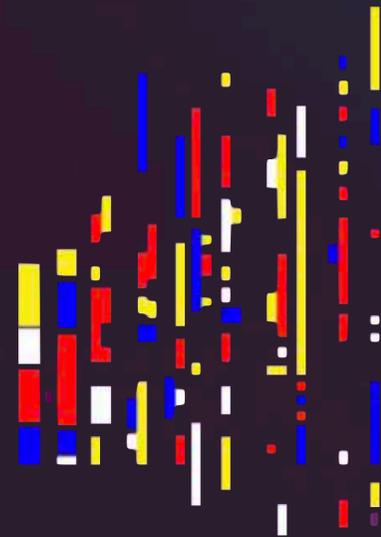
futuristgerd.com



thegoodfuturefilm.com



Steering Education:
From Engagement to Empowerment



The next 10 years will bring more change than the previous 100 years

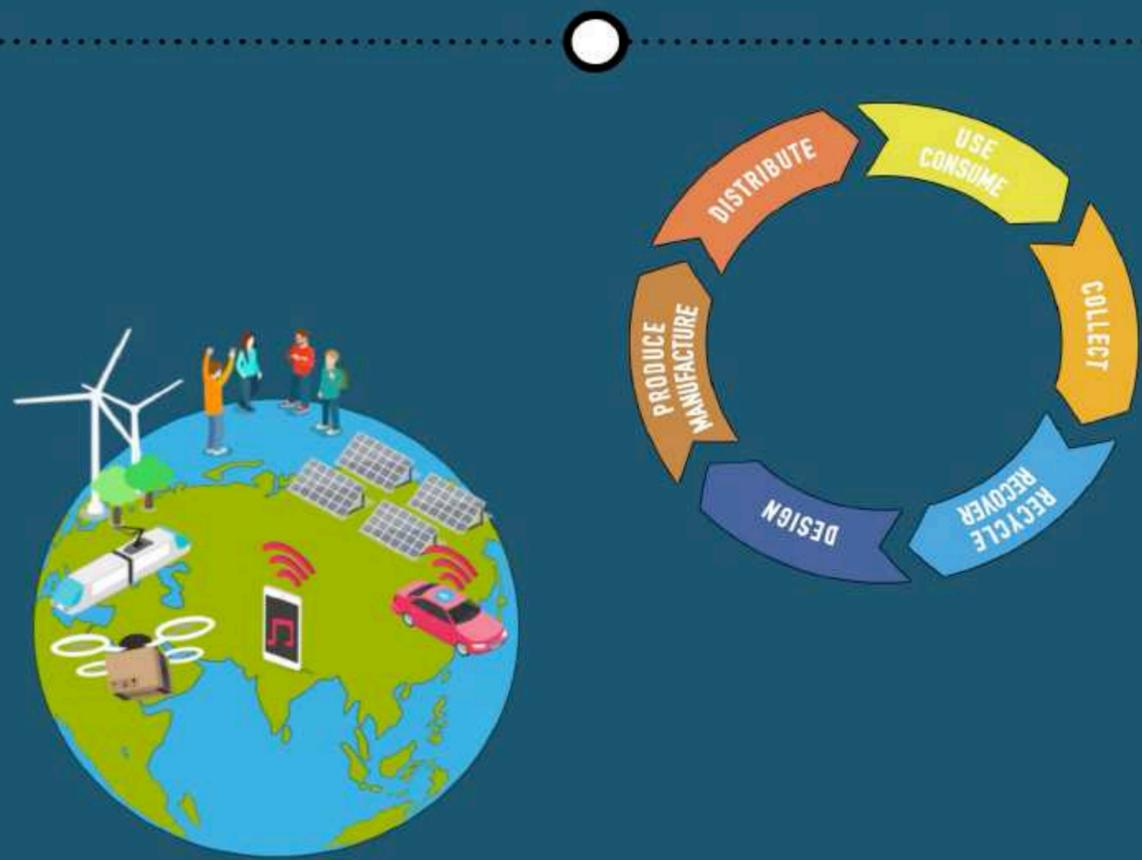
**| SCIENCE |
| FACT |**

The 3 Revolutions

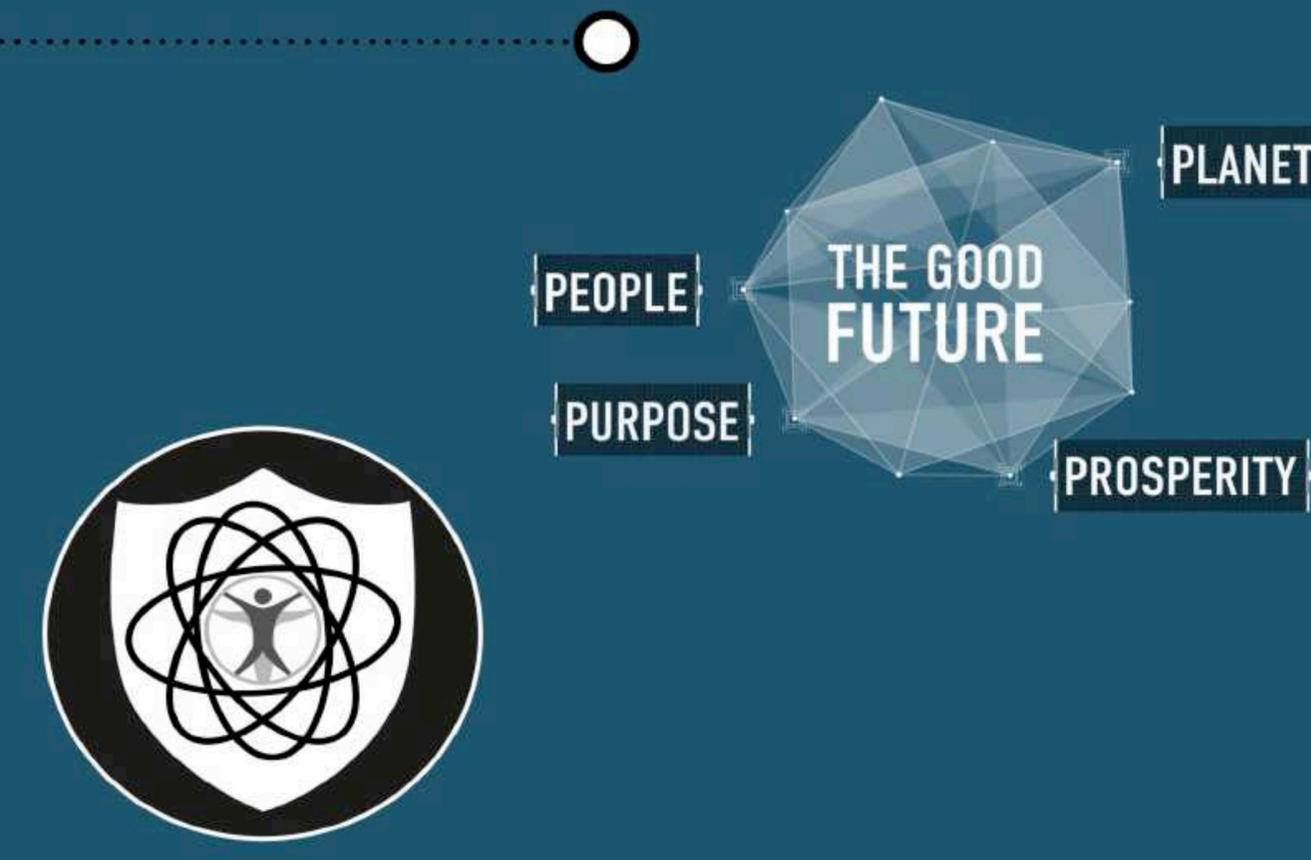
DIGITAL REVOLUTION



SUSTAINABILITY REVOLUTION



PURPOSE REVOLUTION



DIGITAL
REVOLUTION

INFO TECH



BIO TECH

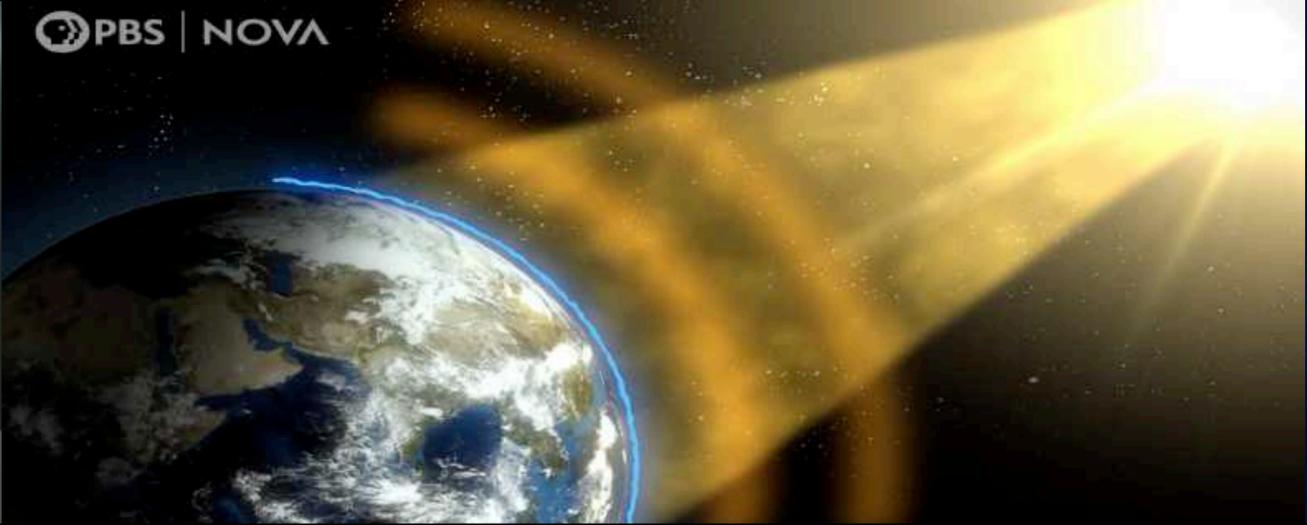


ENERGY & CLIMATE TECH

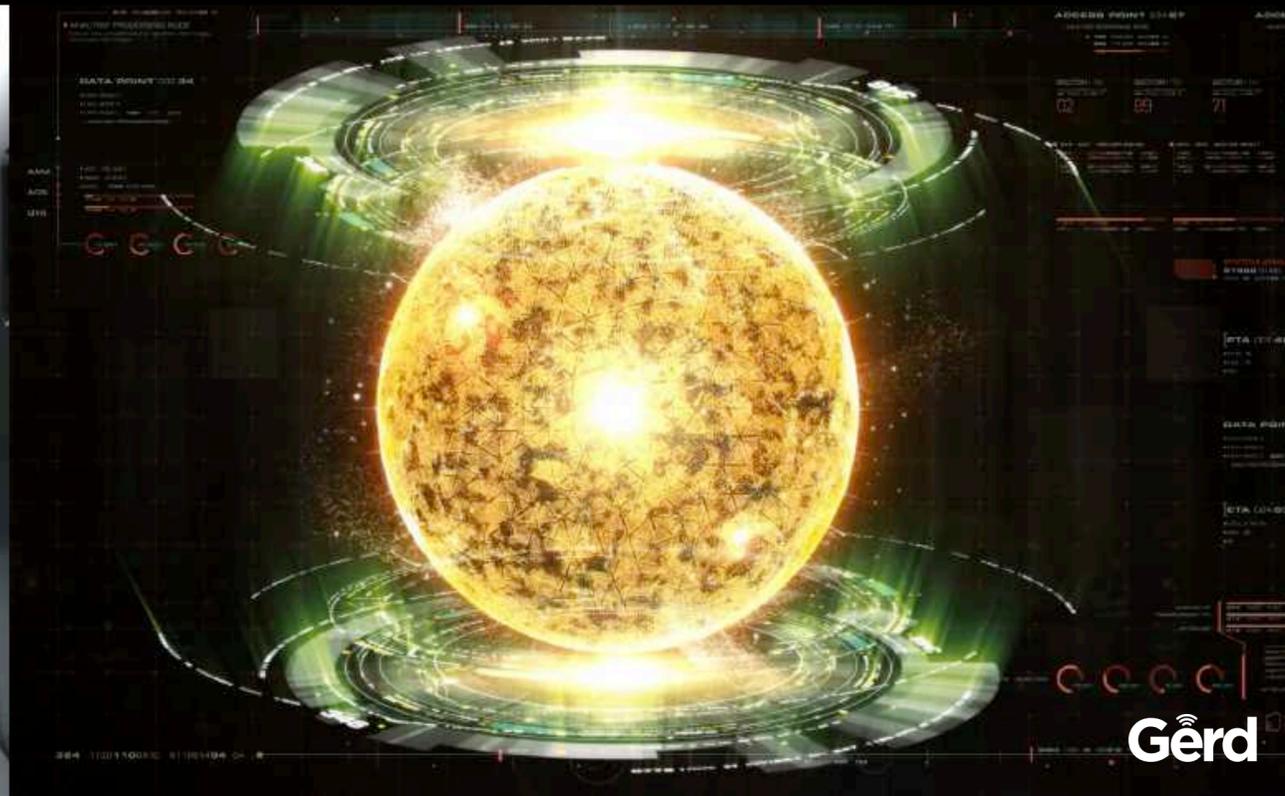
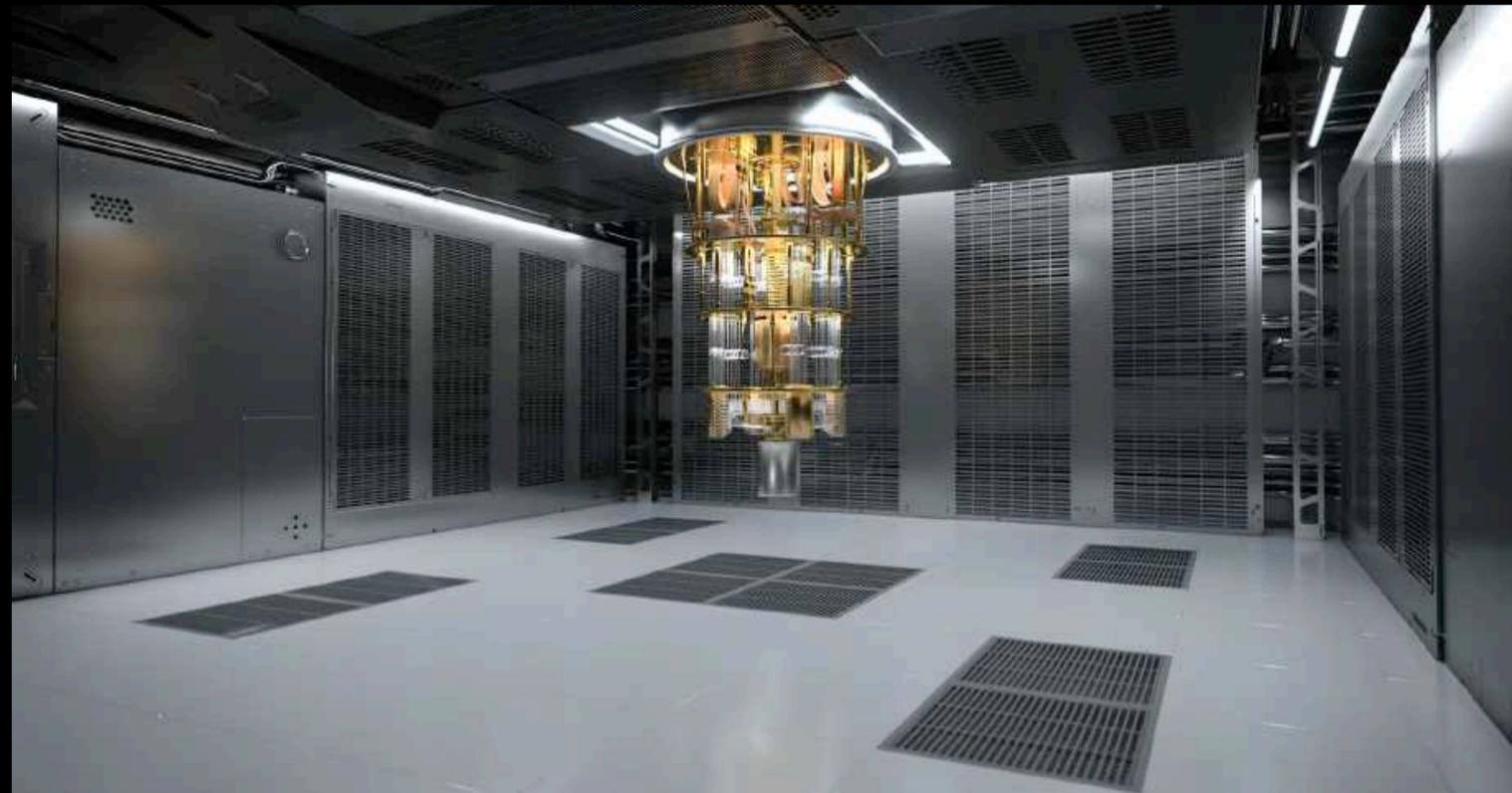
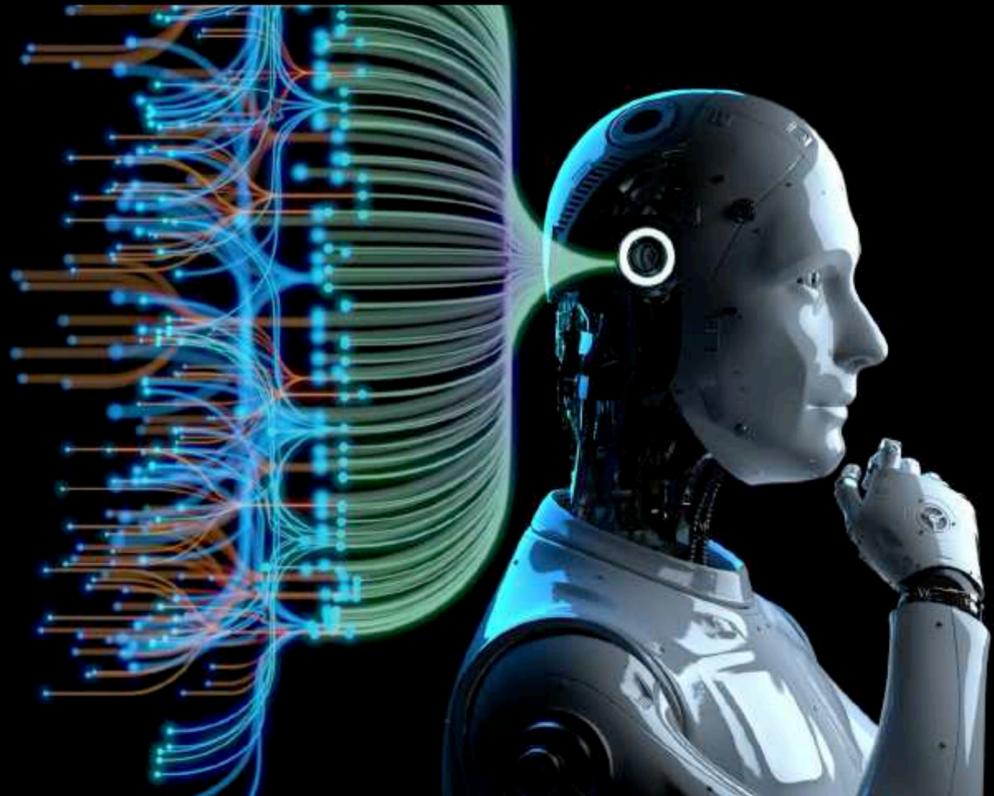


AI TECH





SIX King-Making Technologies : AI, Quantum Computing, Nuclear Fusion, Synthetic Biology, Genome Editing, Geo-Engineering





Elbert Hubbard

One machine can do the work of fifty ordinary men. No machine can do the work of one extraordinary man.

195 448 714

1911



Marshall McLuhan

“Education must shift from instruction, from the imposing of stencils on brain pens, as it were, to discovery — to probing and exploring and to the recognition of the language of forms.”

192 456 709

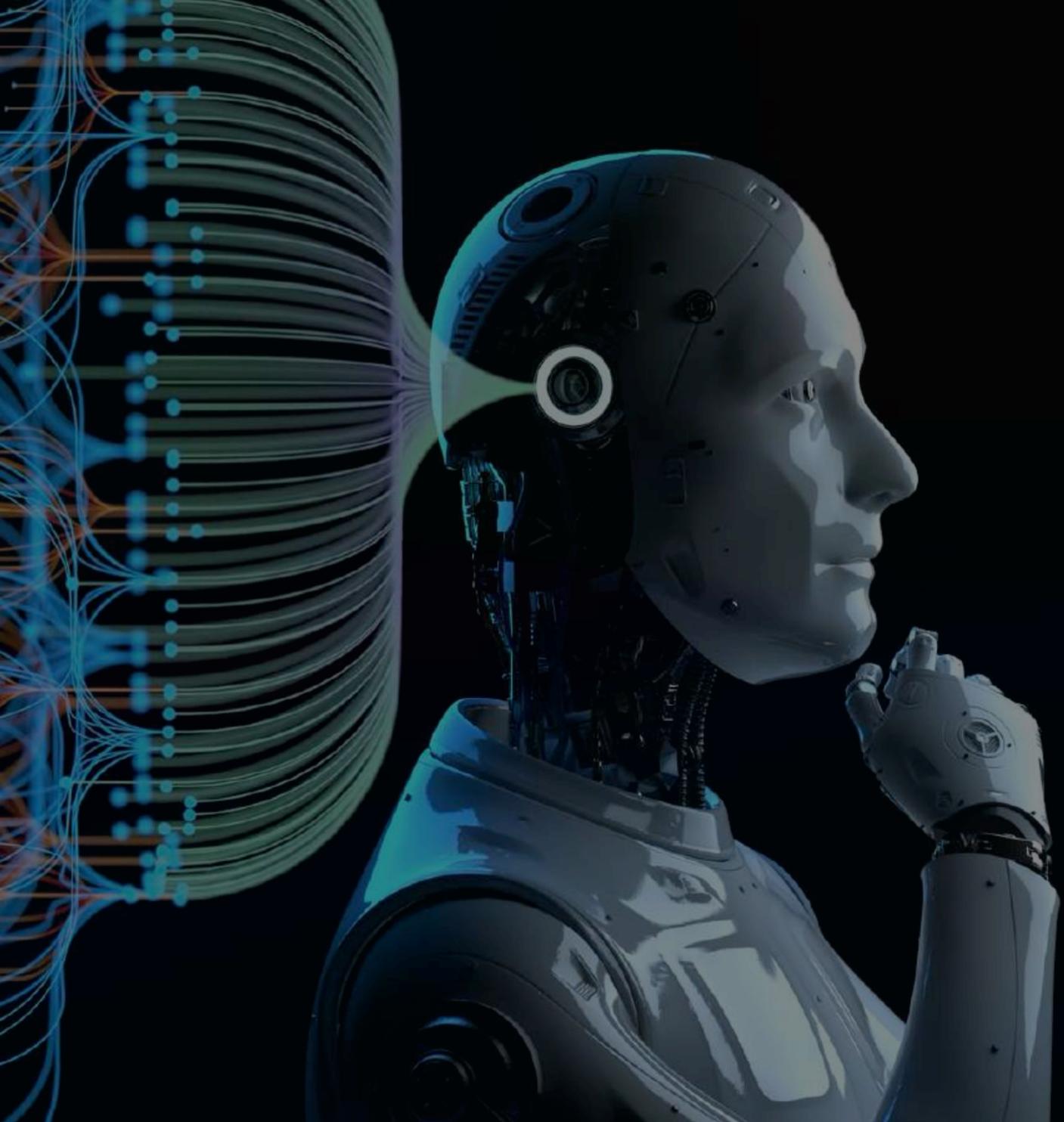


Isaac Asimov

“That's another trouble with education as we now have it. It is for the young, and people think of education as something that they can finish.”

189 442 715

21 Oct 1988



AI: “Computer systems that turn information and data into **KNOWLEDGE**”

(DEMIS HASSABIS, CEO, DEEPMIND)

GenAI: “Computer systems that turn information, data and knowledge into **CONTENT**”

(GERD)

..turning information, data and knowledge into **CONTENT**

(GenerativeAI)

GOOGLE

← ▾ DF Airways

Dear Customer Service,

Thank you for the voucher. However, I would like to request a full refund for my canceled flight, DF 4542, on February 4, 2023. I understand that you are offering a voucher as a gesture of goodwill, but I would prefer to be reimbursed for the cost of my ticket.

I appreciate your understanding.

Sincerely,
Rowan

↻ Recreate ▾ Refine

Insert

GOOGLE UNVEILS NEW A.I. TECH

ABC7 NEWS

E5E5E5 100%

Export

Designer

an app that has a navigation bar with a camera icon, "Photos" title, and a message icon. a feed of photos with each photo having|

Design

..turning information, data and knowledge into **CONTENT**

GOOGLE

← ▾ DF Airways



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↻ Recreate ▾ Refine

Insert

GOOGLE UNVEILS NEW A.I. TECH

ABC7 NEWS



Gerd

I asked ChatGPT 4 (Pro); What skills will I need for business and management in the future, as routine work is increasingly done by AI?



What skills will I need for business and management in the future, as routine work is done by AI?



As the adoption of AI increases, the demand for certain skills is likely to grow in the field of business and management. This change will demand a shift from routine work to tasks that require uniquely human skills. Here are a few of these crucial skills:

1. **Strategic Decision-Making:** As AI takes over routine tasks, managers will need to focus more on strategic decisions that will shape the future of the business. This involves not just analyzing data but interpreting what it means for the business and making informed predictions.
2. **AI Literacy:** Understanding how AI works and how it can be applied in business is going to be essential. This includes being aware of the strengths and limitations of AI, understanding the basics of data analysis, and being able to interpret AI outputs.
3. **Emotional Intelligence:** AI isn't capable of emotional understanding or empathy. Managers will need to be adept at understanding and responding to the emotional needs of their team members. This involves skills such as empathy, motivation, social awareness, and relationship management.
4. **Communication and Collaboration:** As AI becomes more prevalent, human collaboration will become even more important. The ability to communicate effectively, build relationships, and work well in teams will be essential.
5. **Innovation and Creativity:** AI is excellent at optimizing existing processes, but it's not so great at coming up with brand new ideas or strategies. The human ability to innovate and think creatively will be increasingly valuable



Stop generating

As machines become smarter and take over more routines, HUMAN-ONLY attributes become invaluable *

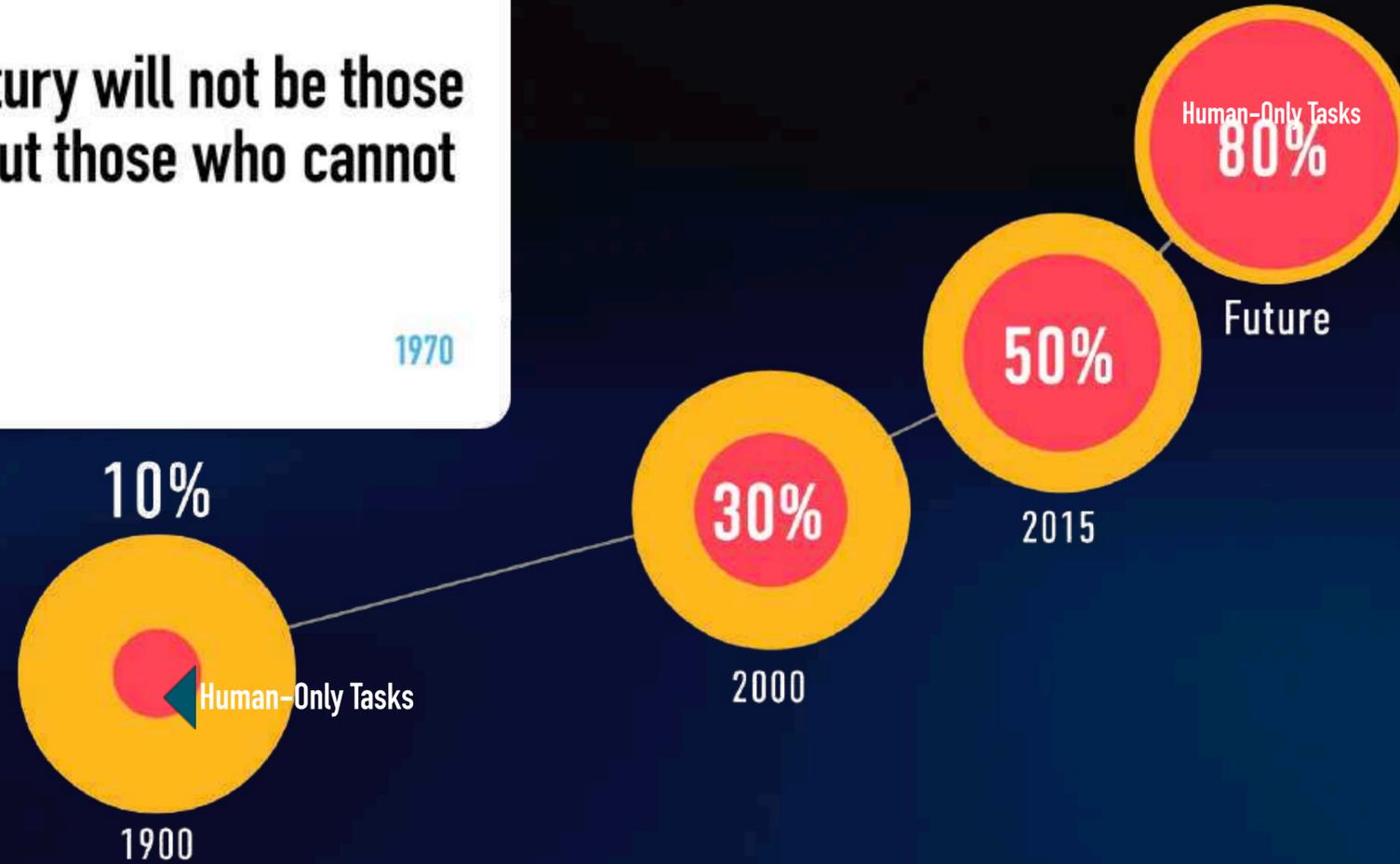


Alvin Toffler

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

148 425 828

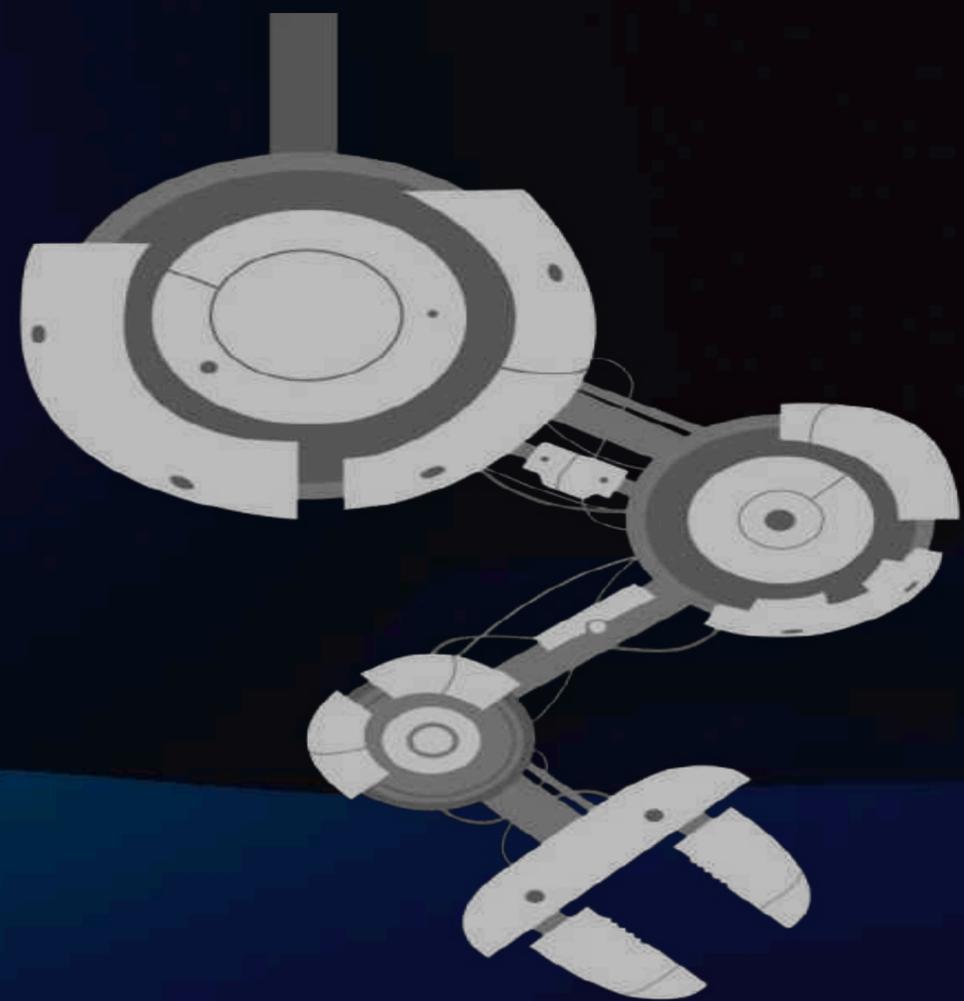
1970



- ▶ Social Well-Being Agent
- ▶ Societal Risk Manager
- ▶ Ethics Specialist
- ▶ Data Bias Supervisor
- ▶ Nature Deficit Therapist
- ▶ Job & Training Inventor
- ▶ HI / AI Interface Manager
- ▶ Climate Change Actionist
- ▶ Rewilderer / Nature Agent
- ▶ Long-Term Thinker
- ▶ Digital Crafts Person



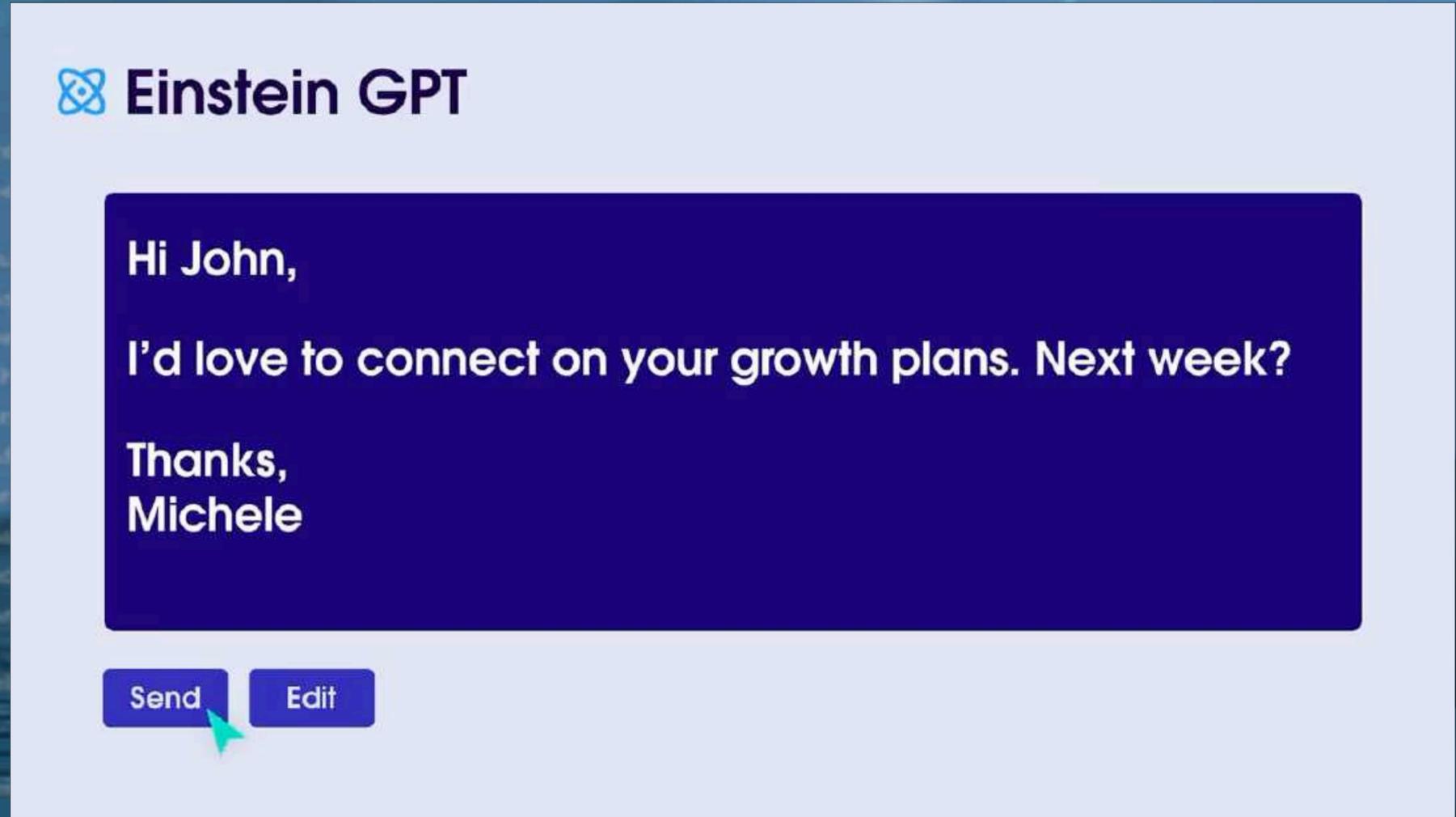
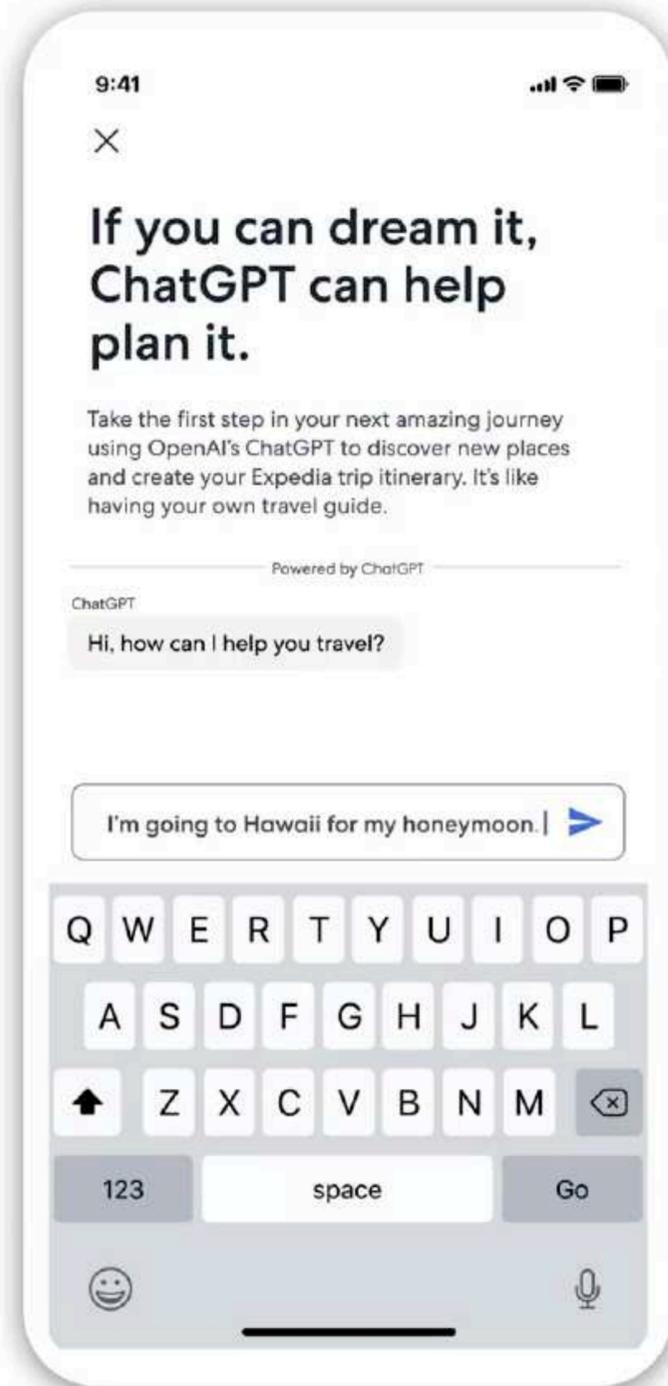
Sadhguru 
@sadhguru 11.3M subscribers 2.8K videos
Official YouTube Channel of Sadhguru >

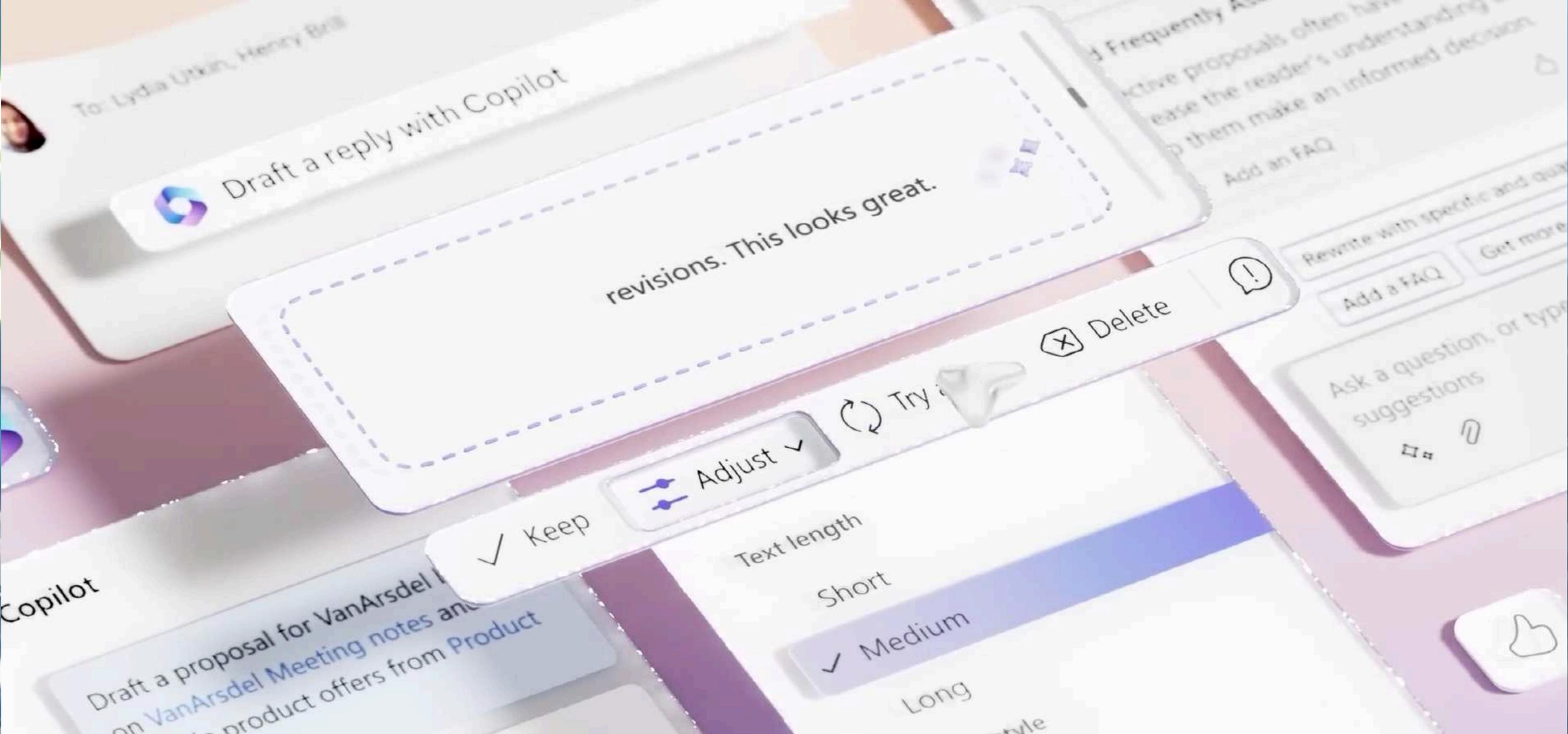


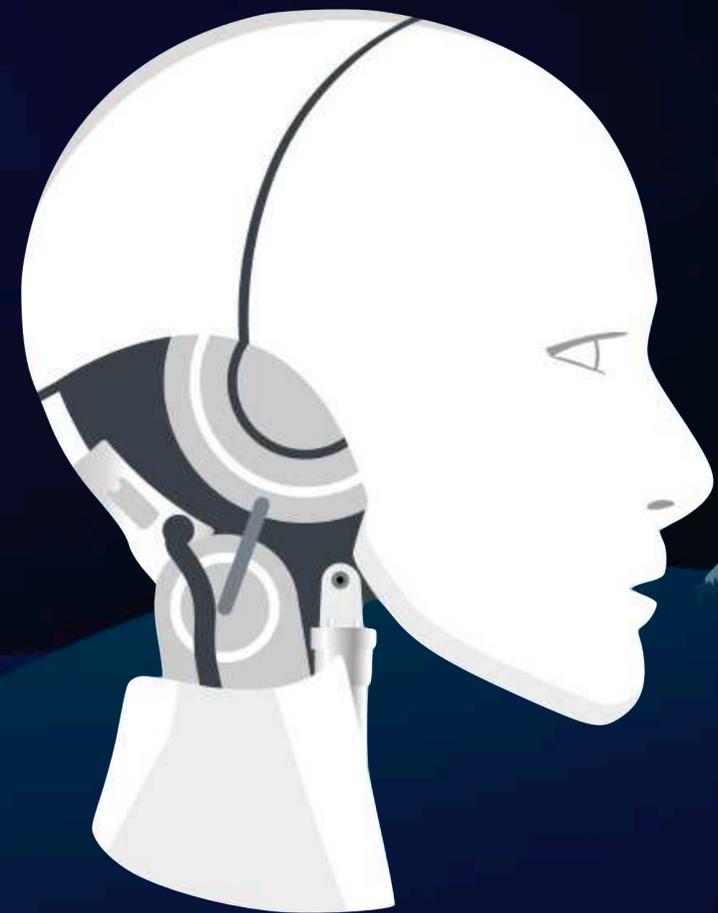
ROUTINE



R O U T I N E

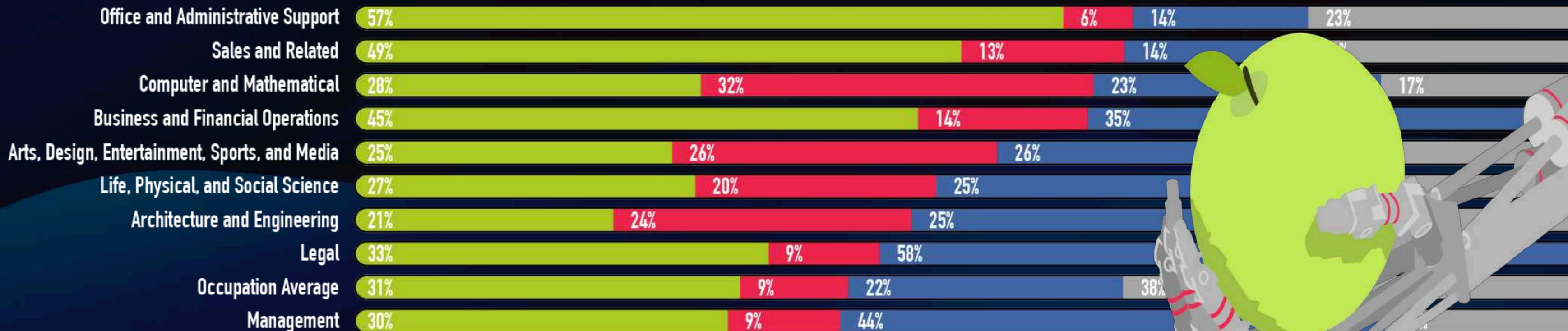
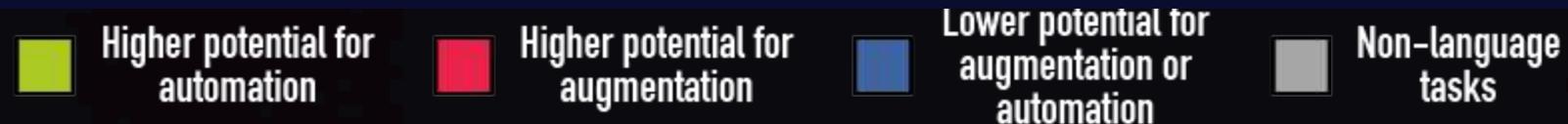




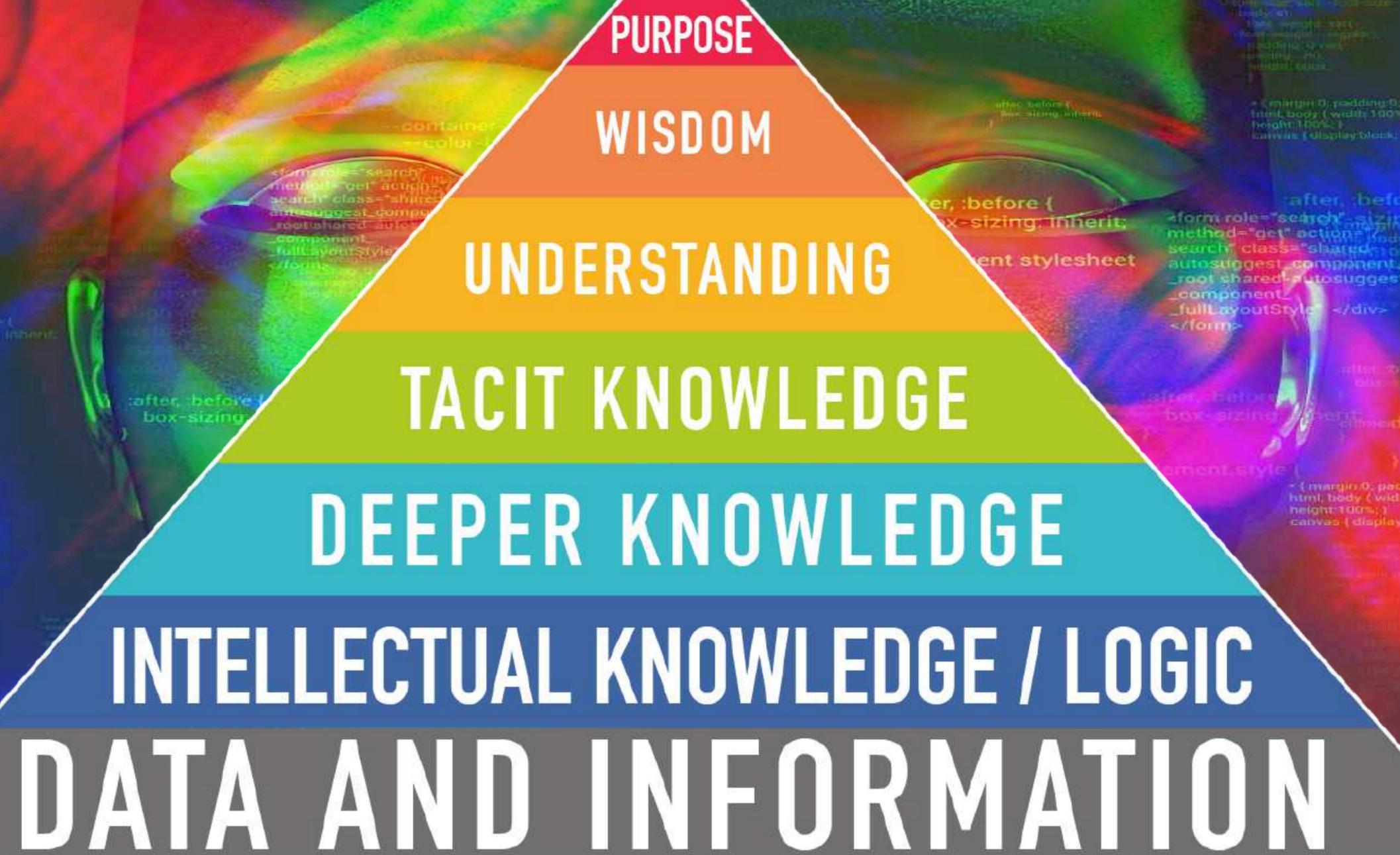


Generative AI including ChatGPT could disrupt – not necessarily replace – **300 million full-time jobs globally** (Goldman Sachs). Experts expect AI to mostly impact white-collar jobs

*Accenture 2023 Research



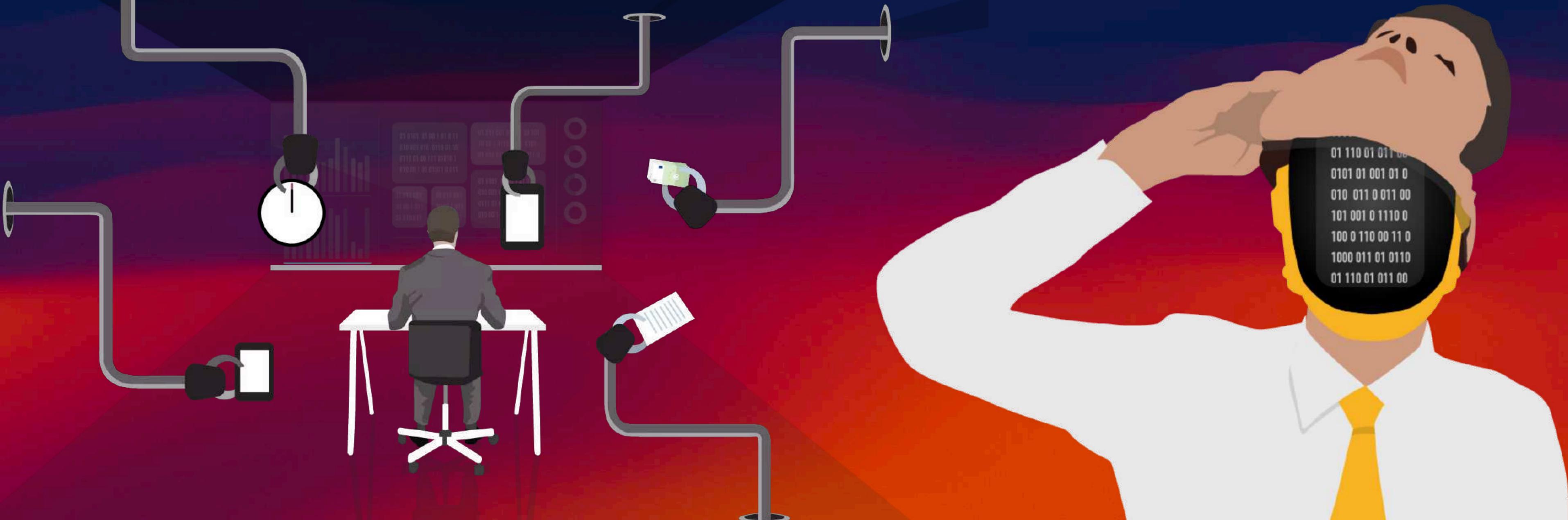
! KNOWLEDGE WORKERS !



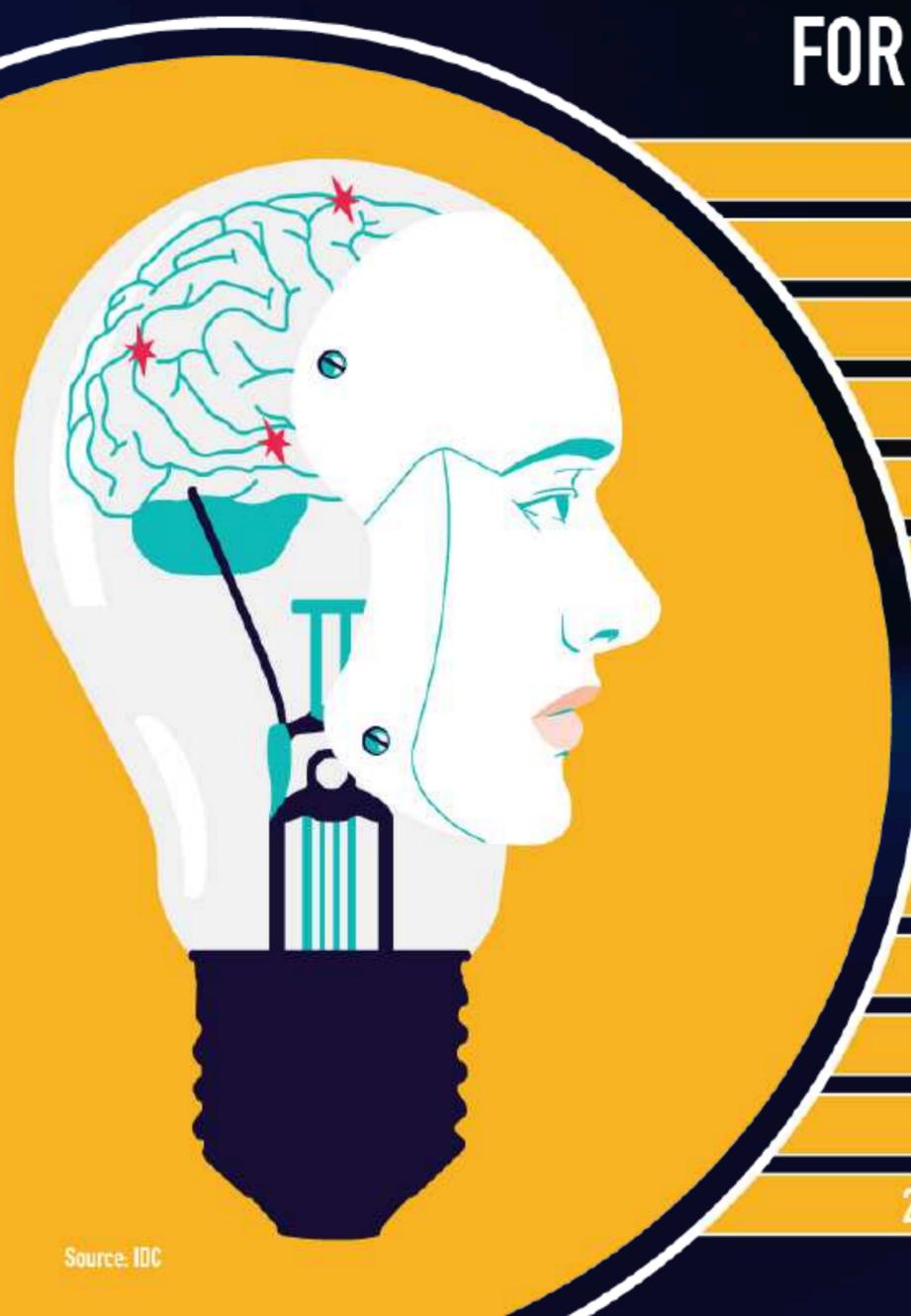


For routine tasks, humans with better tools (like AI) will beat humans without tools – But very few tools will beat humans BY THEMSELVES

If you work like a robot, a robot will take your job! And if you LEARN...



WHAT ARE THE PRIMARY BUSINESS OBJECTIVES FOR USING AI FOR YOUR PROJECTS/INITIATIVES?



Automation !??



Augmentation !!!



Vacation...?

Are Four-Day Workweeks the Future?

Selected results from the four-day work week pilot program in the United Kingdom

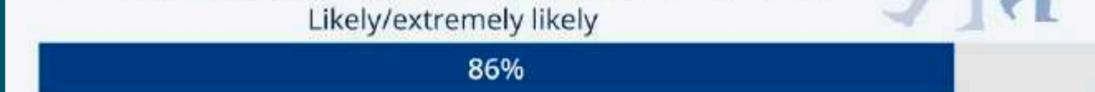
How smooth was the transition to the four-day week?



How did it affect business productivity?



How likely is it that you will implement the four-day week?



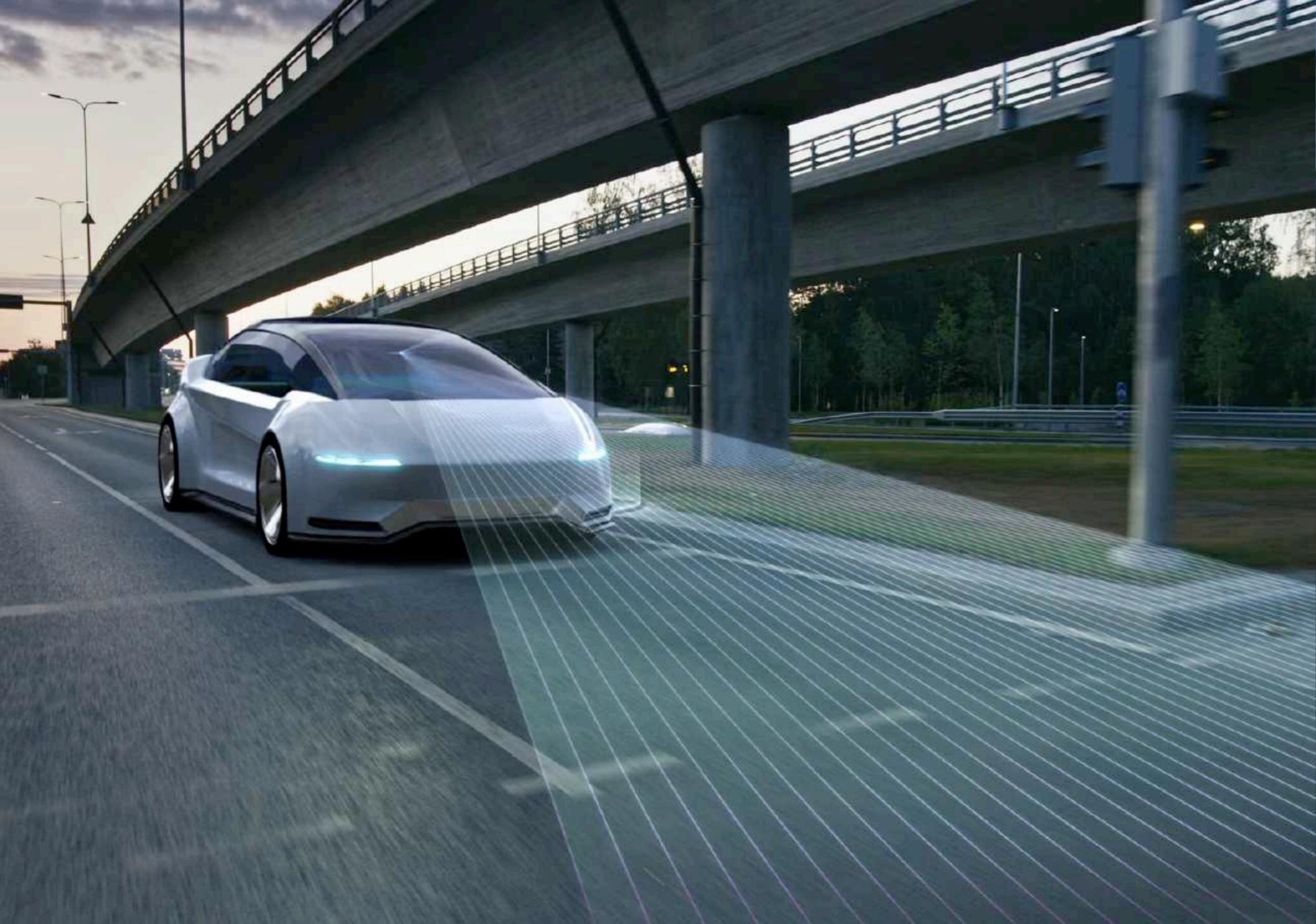
Leaders of 41 participating companies surveyed. Preliminary results.

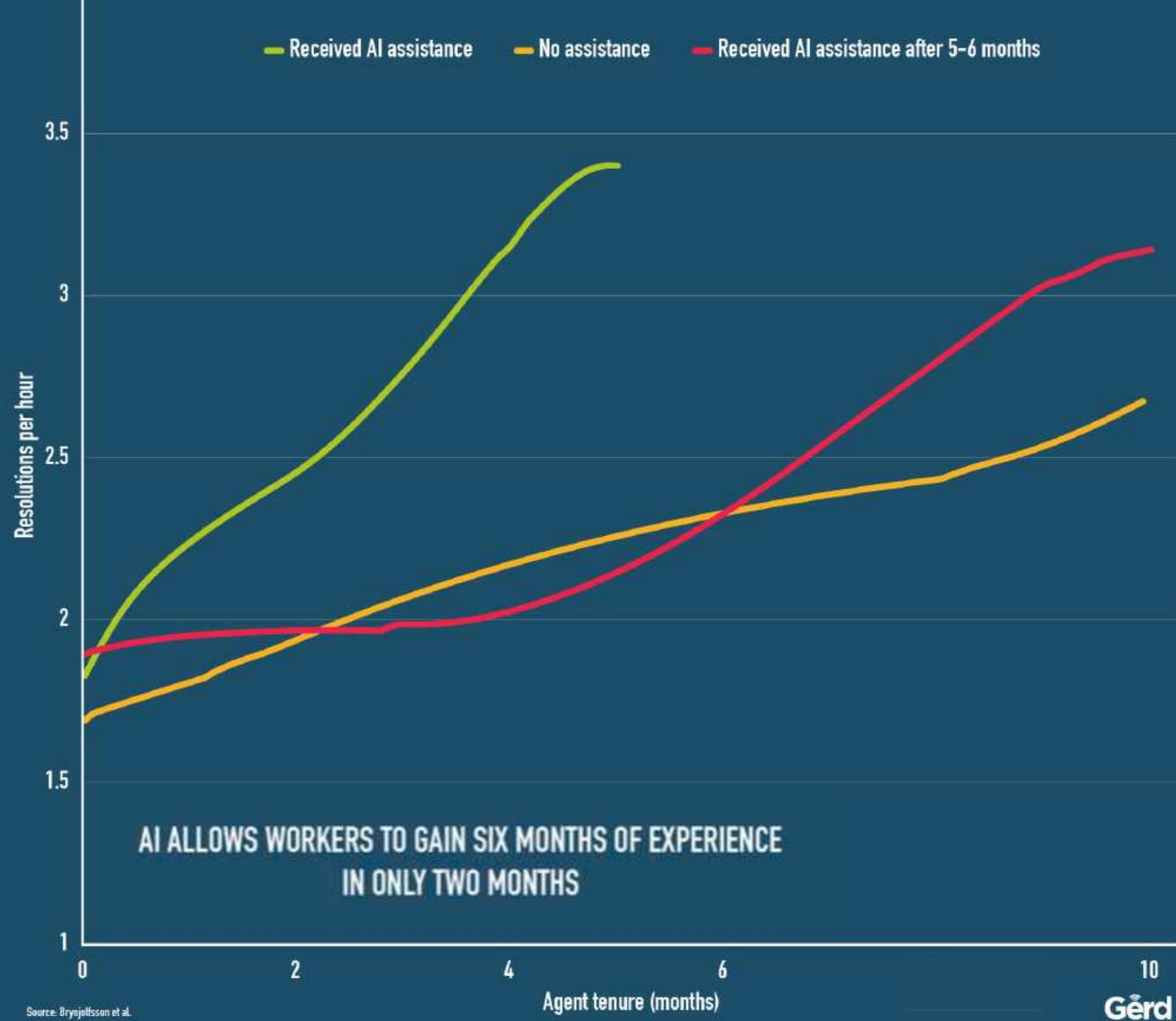
Source: 4 Day Week Global



Automating routines: Don't mistake a clear view with a short distance! (Paul Saffo)



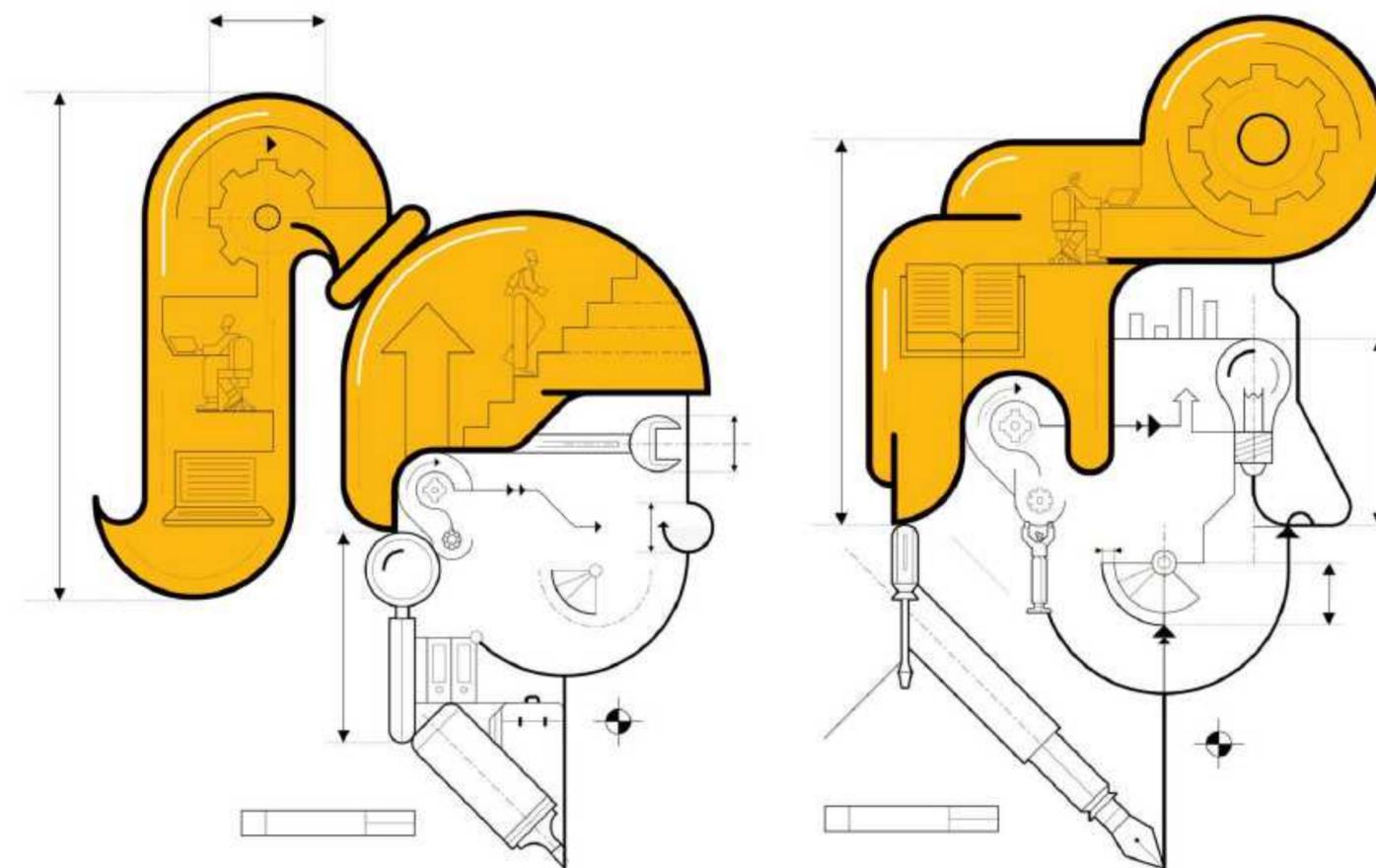




The New-Collar Workforce

There's a huge, capable, and diverse talent pool out there that companies aren't paying nearly enough attention to: workers without college degrees. It's time for a skills-first approach to hiring and people management. by Colleen Ammerman, Boris Groysberg, and Ginni Rometty

From the Magazine (March–April 2023)



Exponential speed of change in labour markets: More jobs for more people **without** formal degrees?

Will the primacy of the university degree as a hiring qualification erode because of AI?

Google Professional Certificates

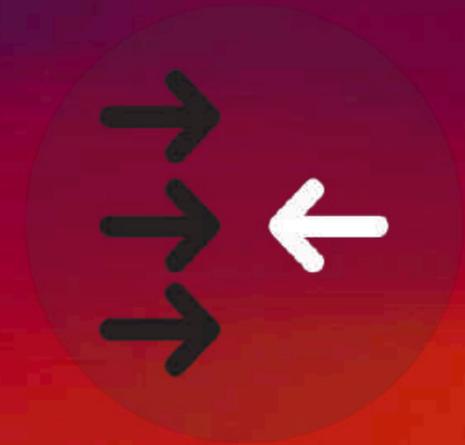
Gain the job-ready skills you need to launch or advance your career in Data Analytics, Cybersecurity, Digital Marketing & E-commerce, IT Support, Project Management or UX Design



Brittany Hoover – Google UX Design Graduate and Digital Designer at Deloitte



VELOCITY



UNORTHODOXY

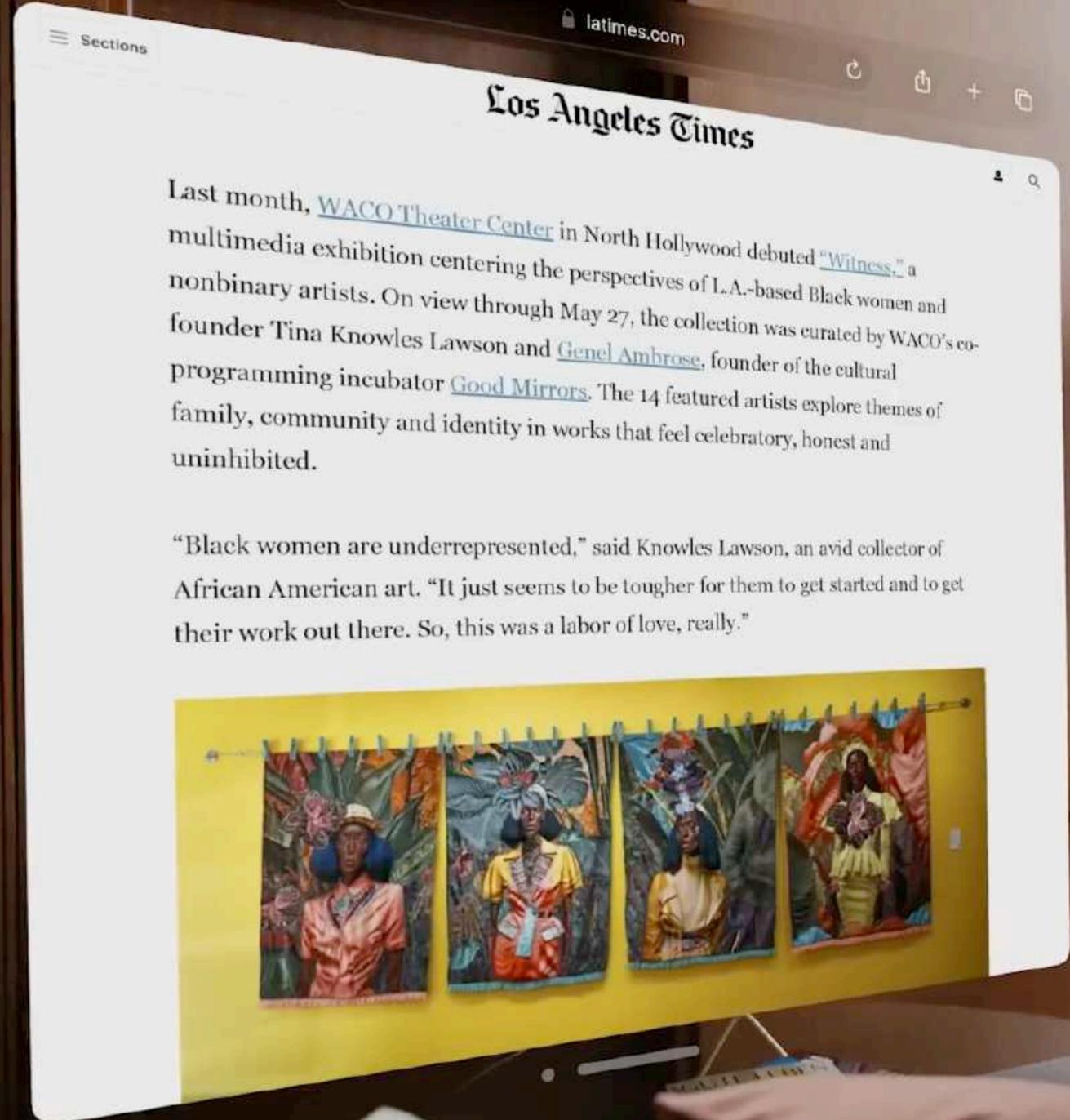


CO-CREATION



AWESOMENESS

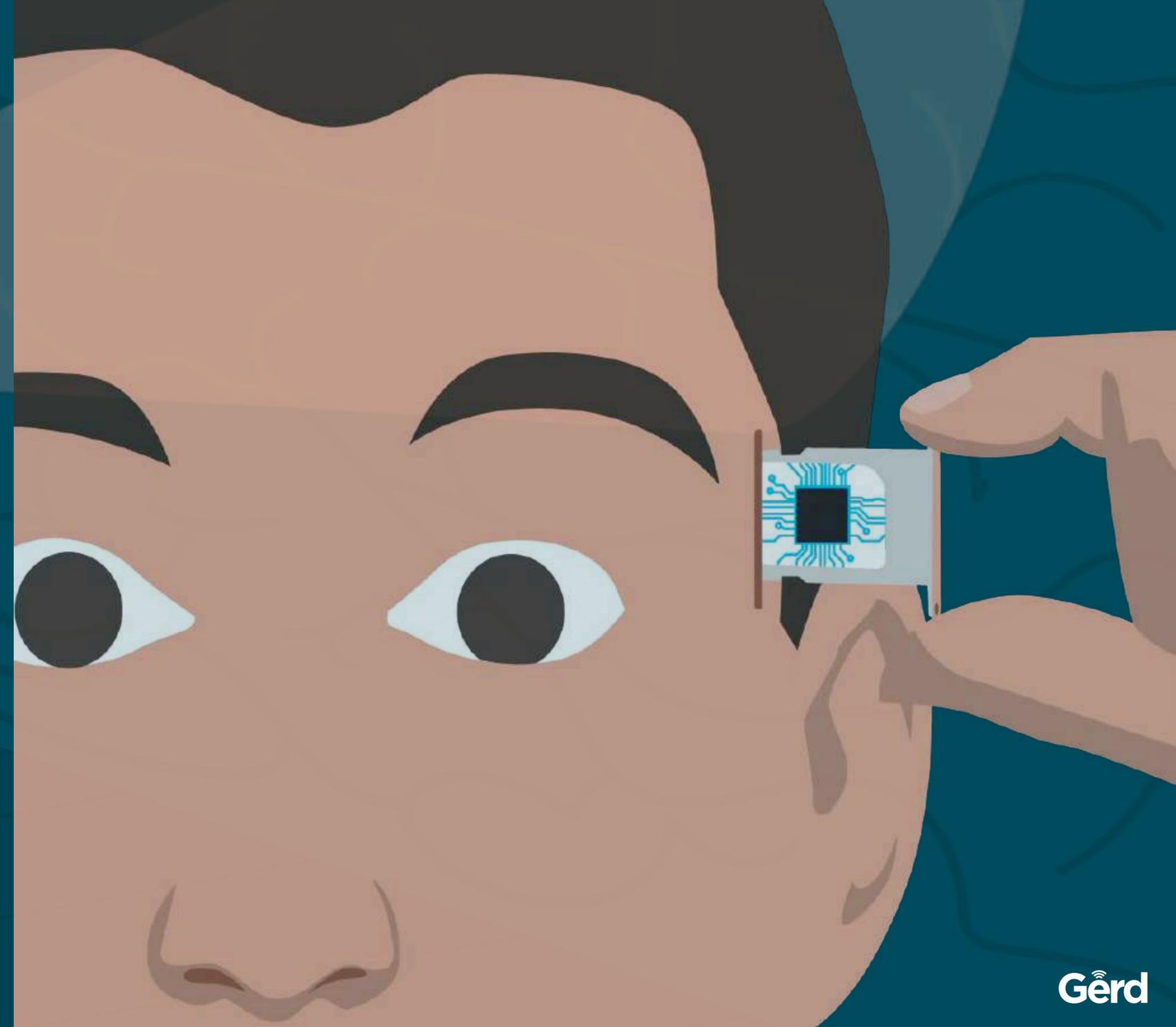
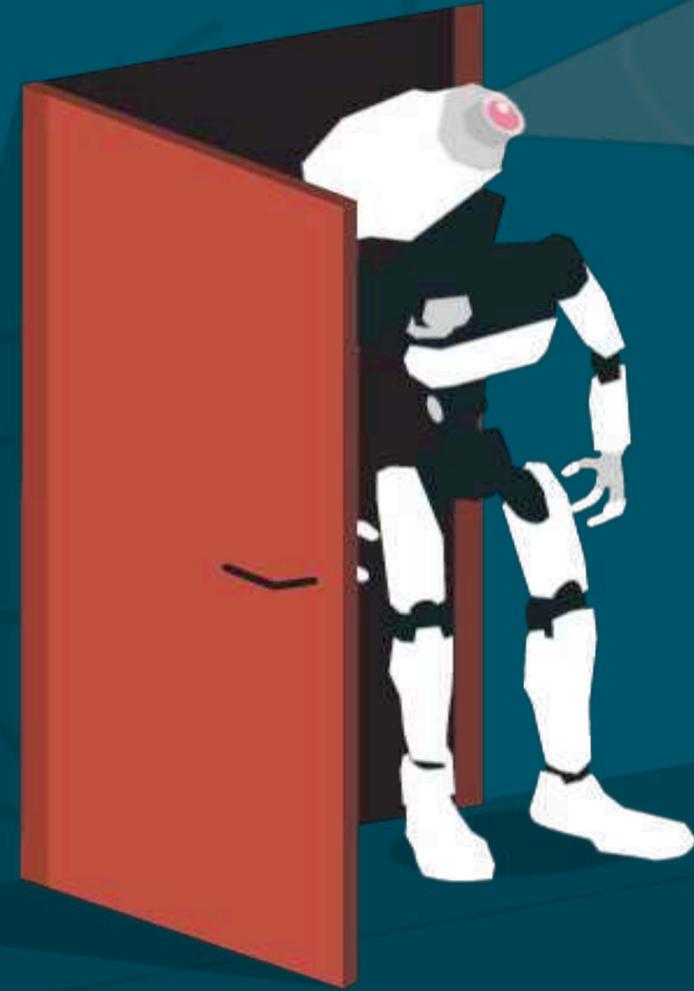
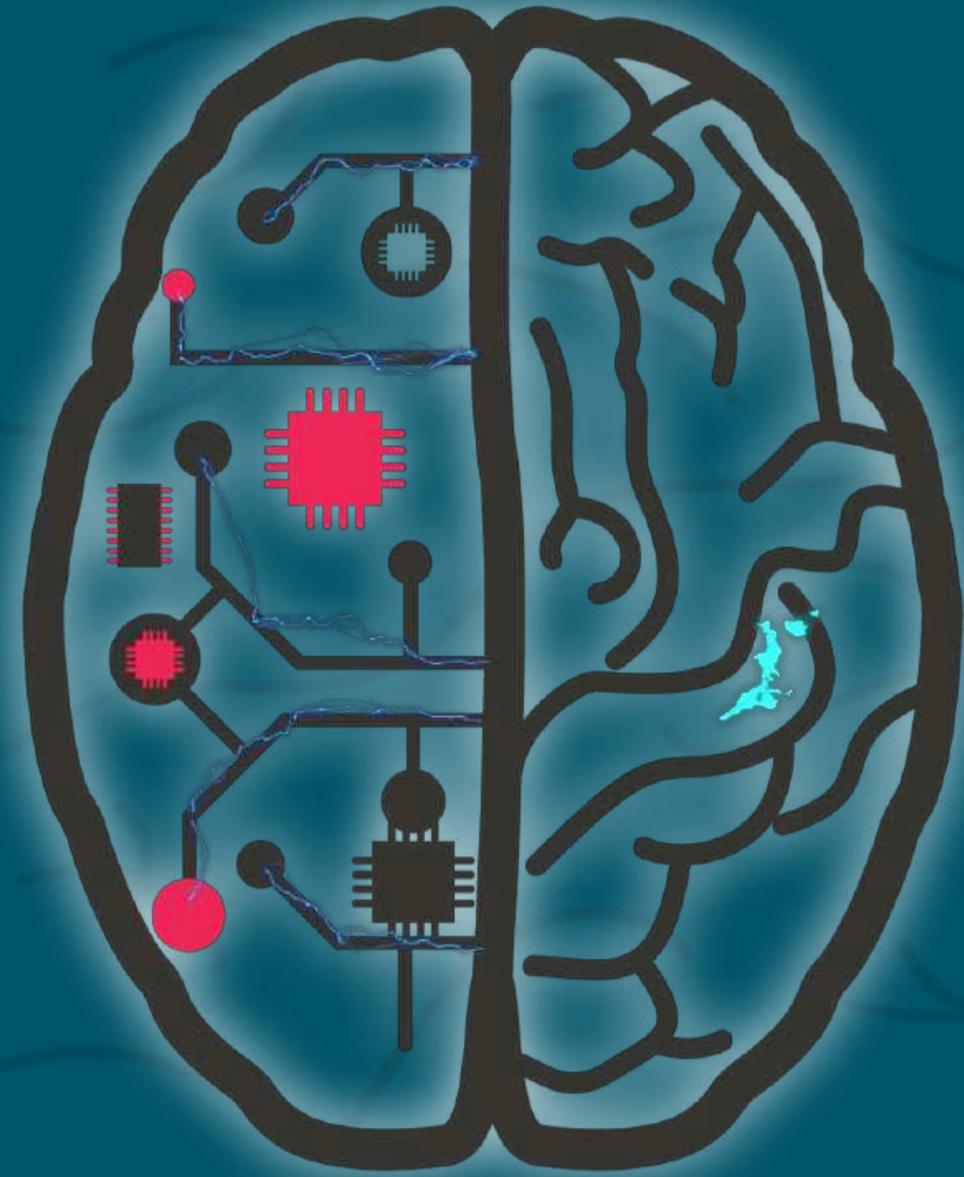






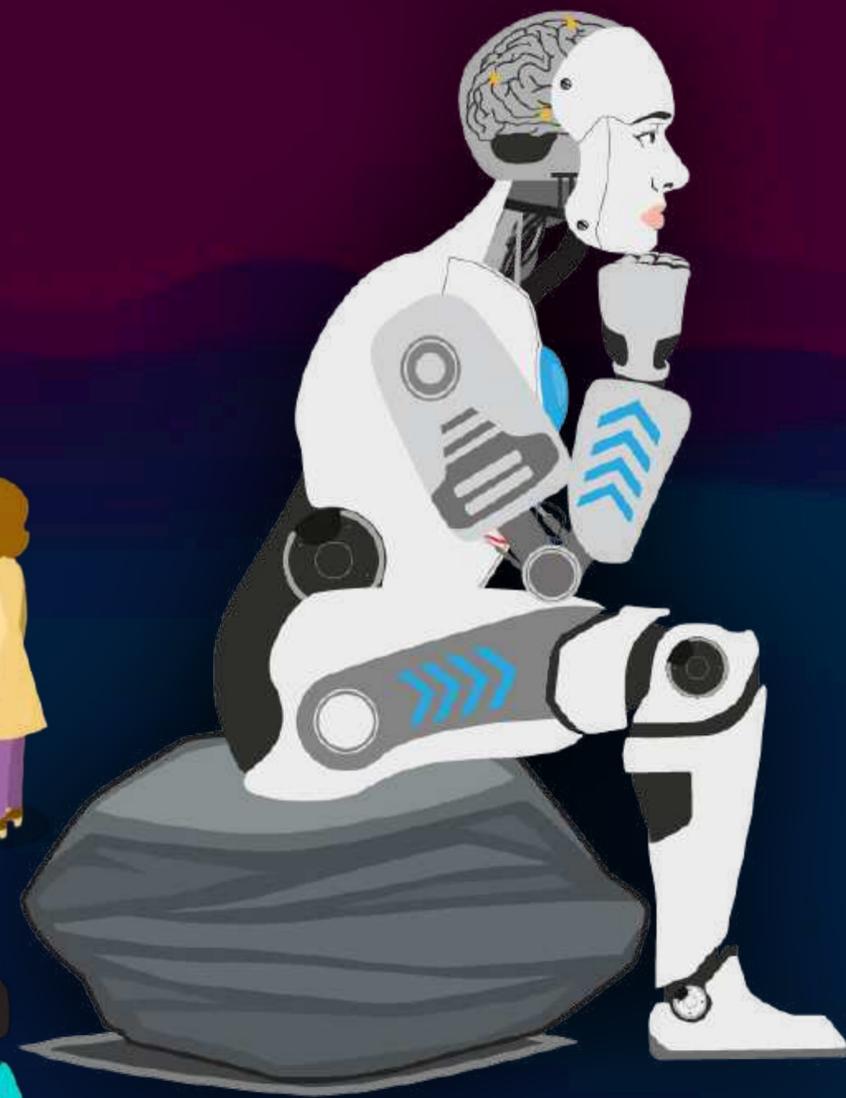
Dramatically increased skill acquisition with AR / VR, AI ++++

Machine Thinking

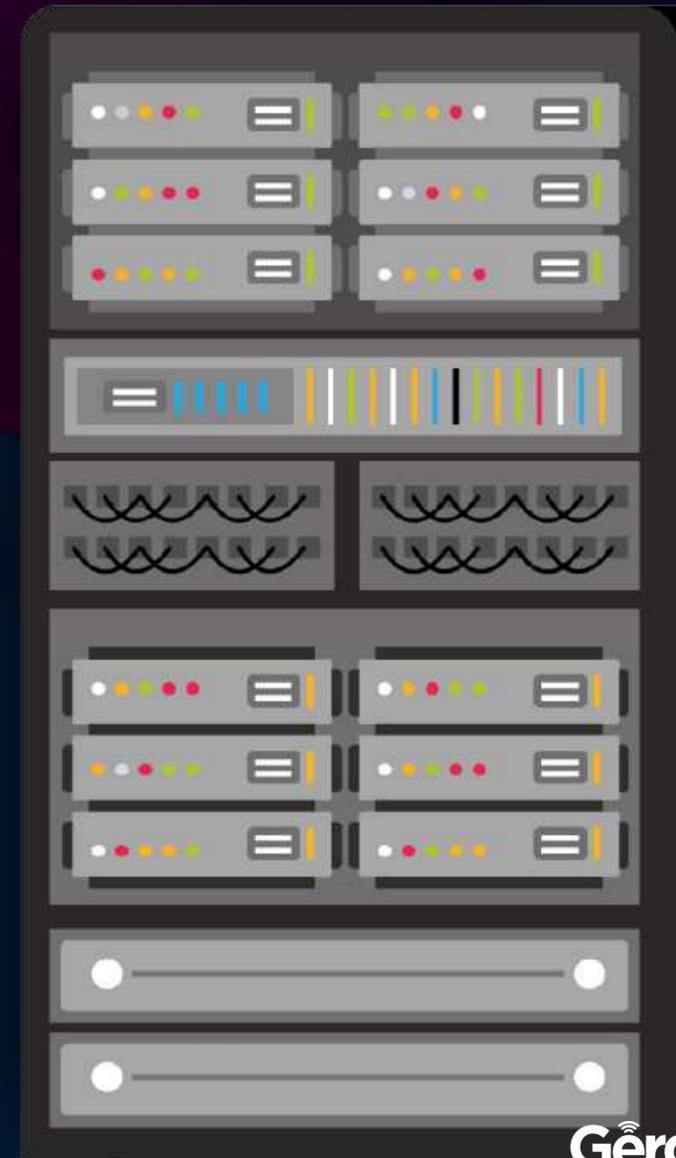




What People Think It Looks Like



What It Actually Looks Like



...Great, thanks



Reductionism
Manipulation
Abdication
Confusion
Errors
Bias

A

I

...Great idea



Challenges of LLM's such as ChatGPT:

Speed not Depth

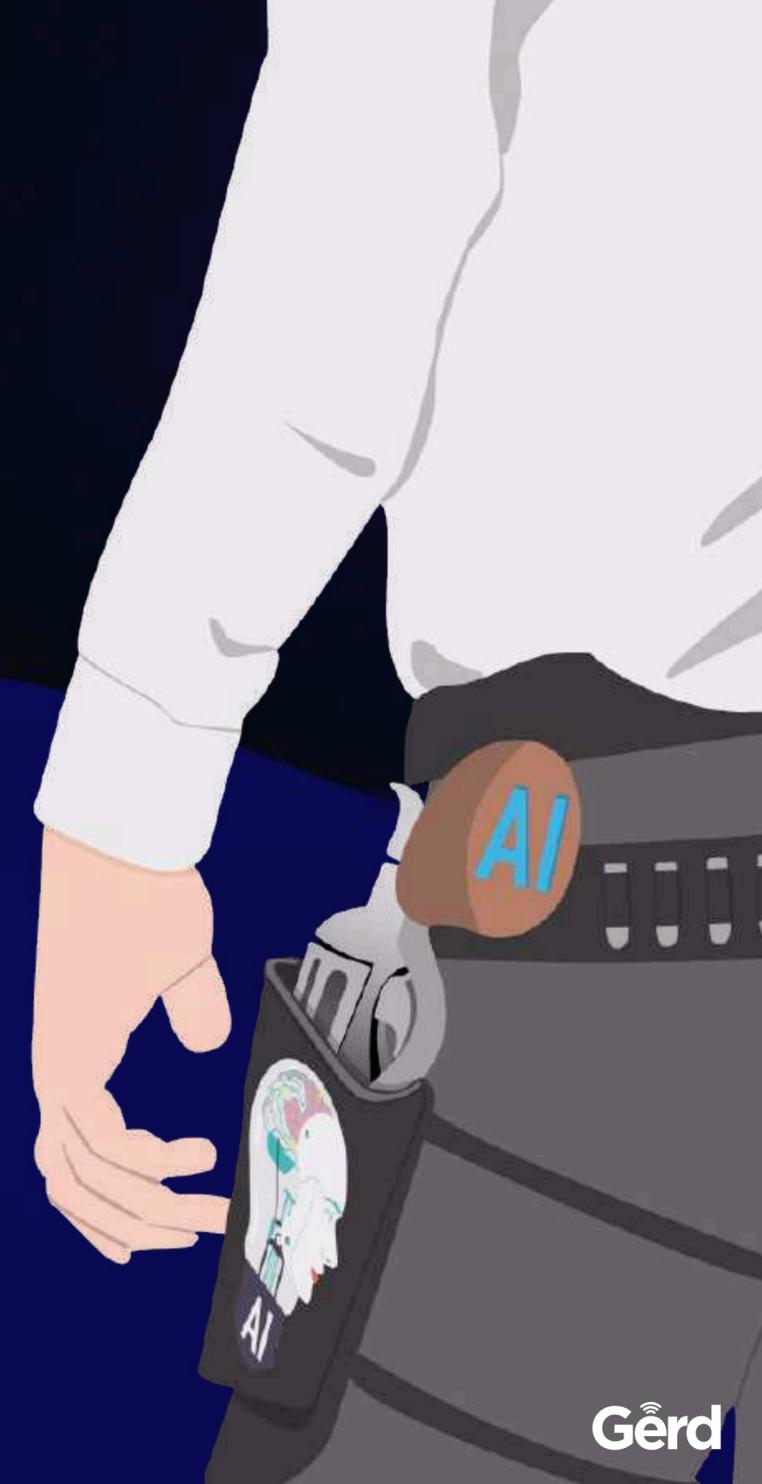
Noise in – Noise out

Coherence not Truth

Patterns not Meaning

Simulations ≠ Reality

Digital World ≠ Real World





TECHNOLOGY HAS NO ETHICS

PEOPLE

PURPOSE

**THE GOOD
FUTURE**

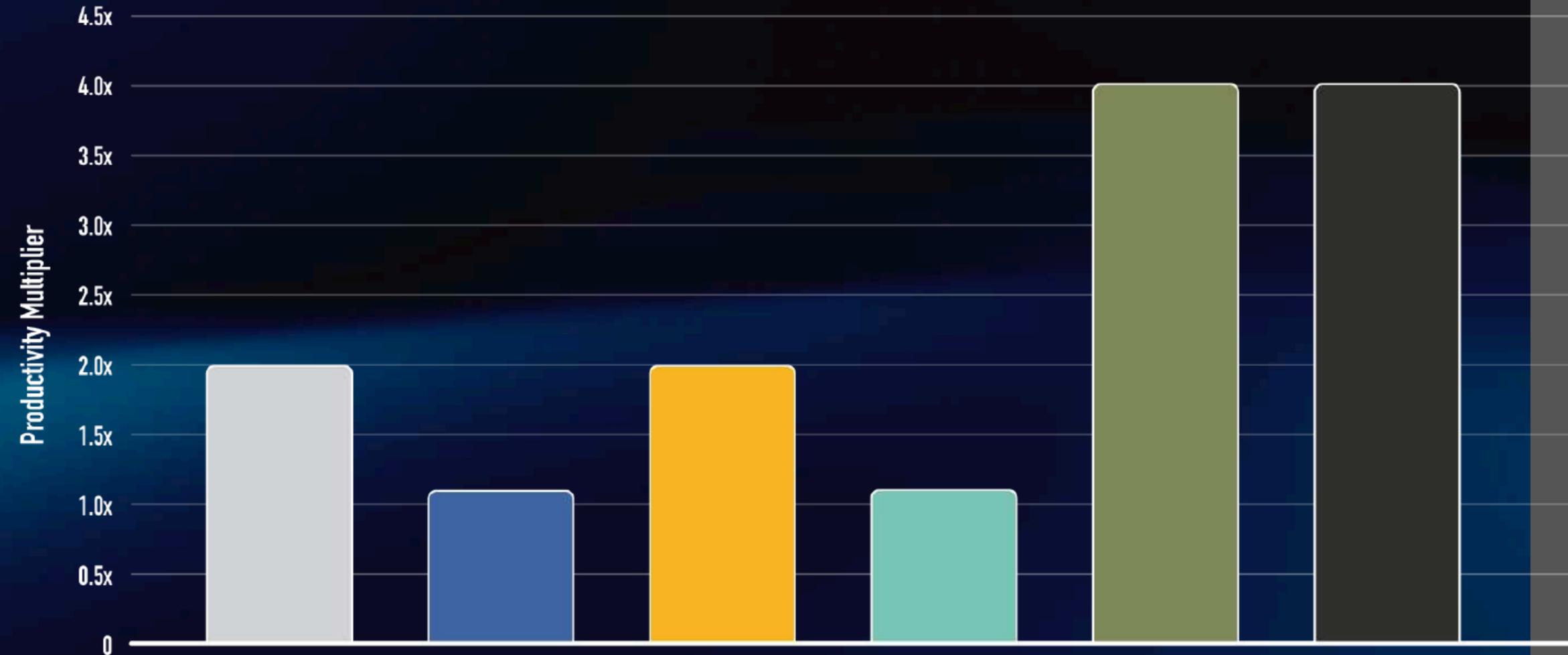
PLANET

PROSPERITY

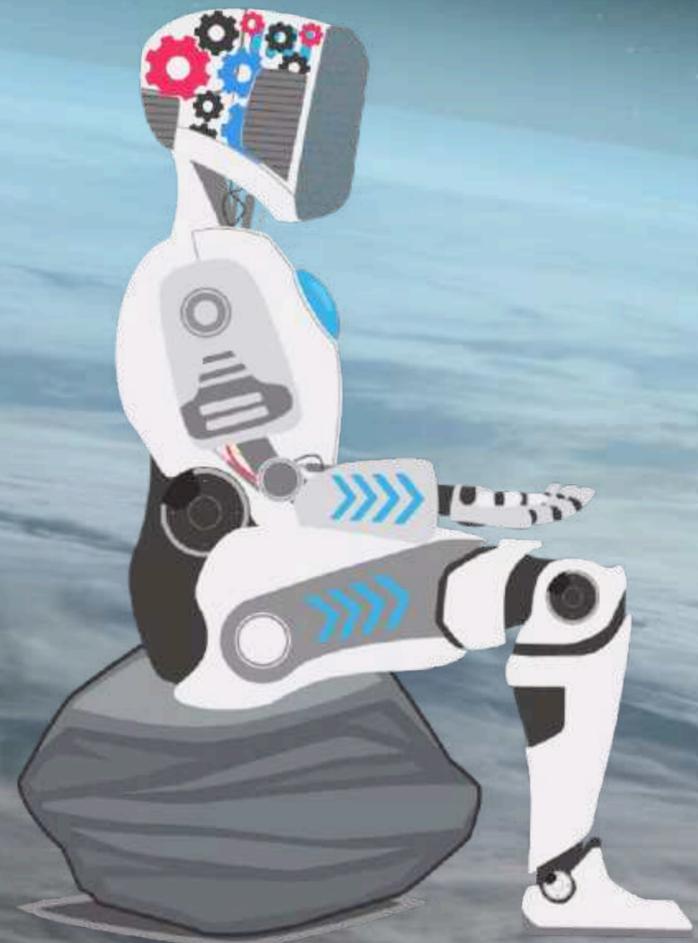
OUTPUT OF AI-ASSISTED KNOWLEDGE WORKERS 2021 TO 2030

BY 2030 AI WILL INCREASE THE OUTPUT OF KNOWLEDGE WORKERS BY 140%

Software Developer Accountant Bookkeeper Lawyer Paralegal Office and Admin Support

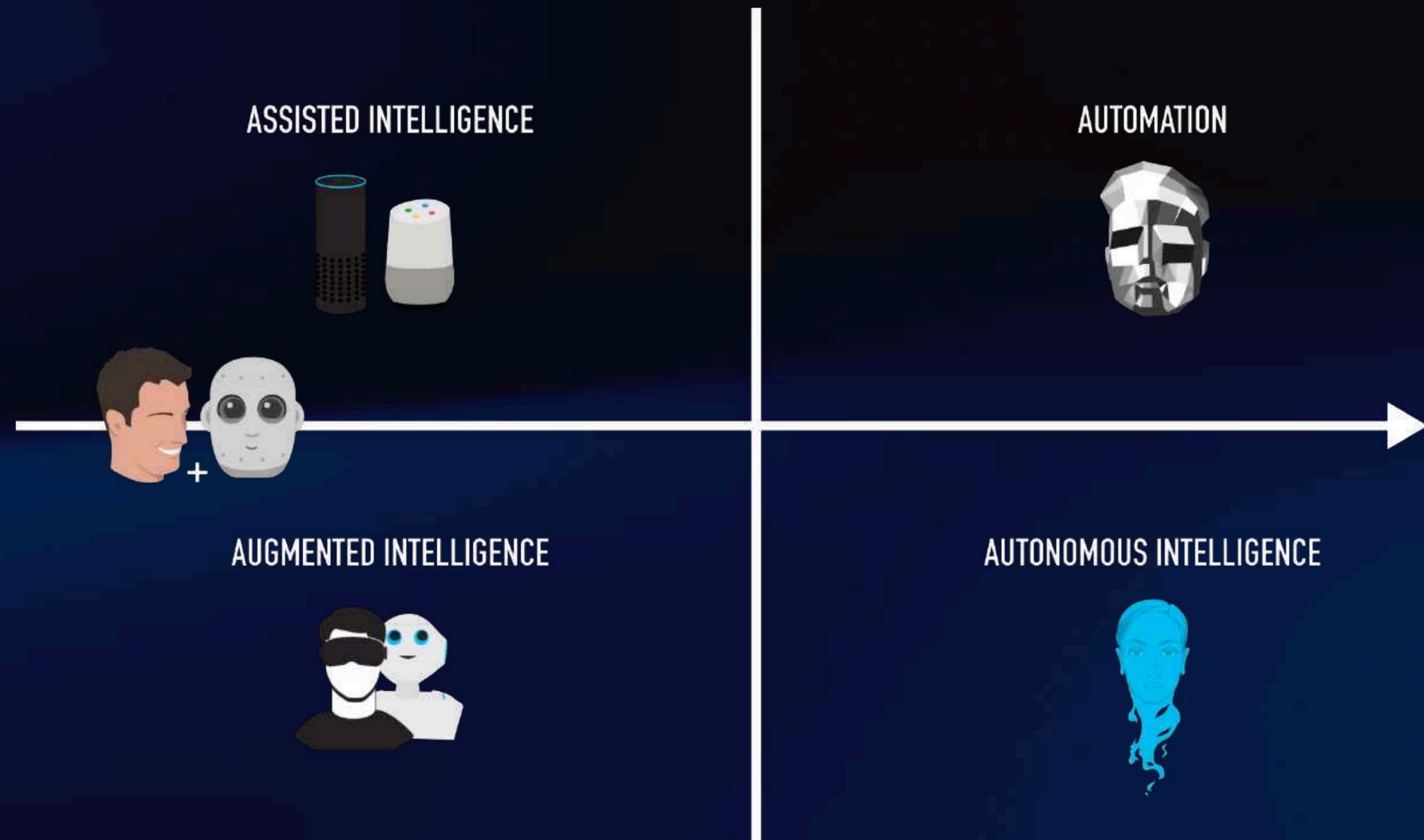


Sam Altman, CEO, OpenAI: 'The coming change will center around the most impressive of human capabilities:
THE PHENOMENAL ABILITY TO THINK, CREATE, UNDERSTAND, AND REASON.



**ARTIFICIAL
GENERAL
INTELLIGENCE**

“Intelligence means having the power to shape the world in your interest” Stuart Russell



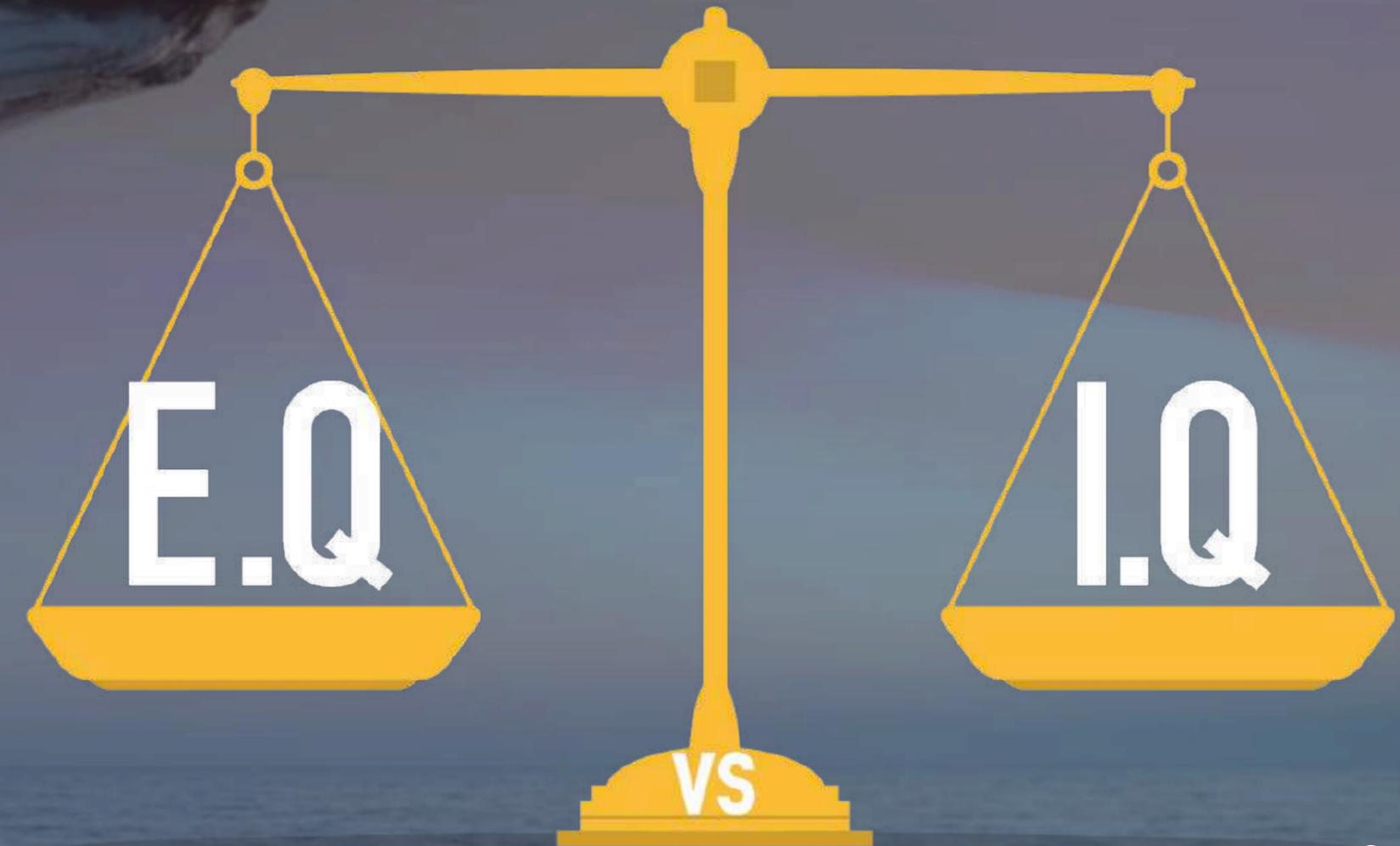
For AI, it's **COMPETENCE** not consciousness that matters

Stuart Russell in “Human Compatible”

We don't just need re-skilling: We need to re-humanise!

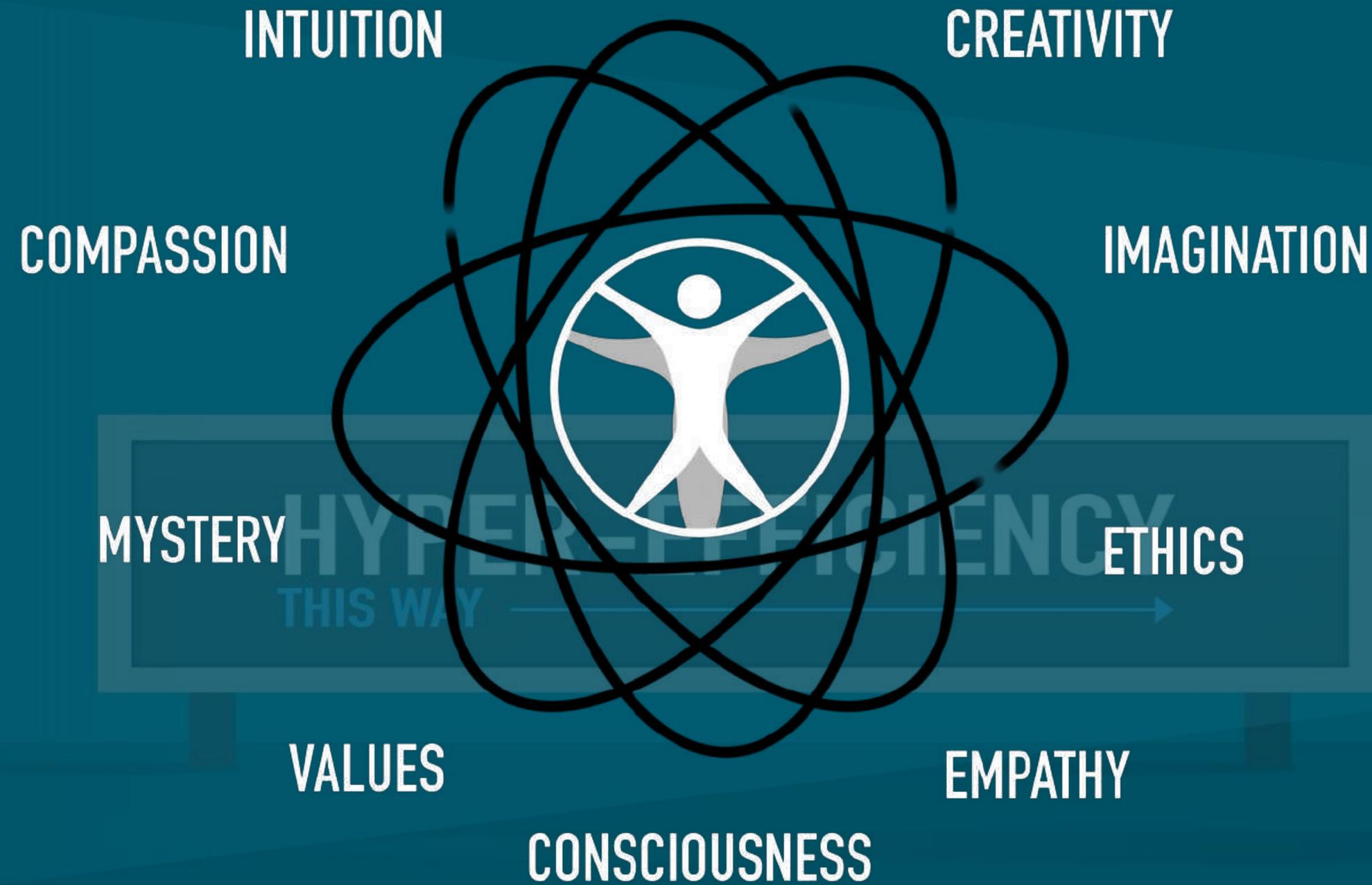
“Imagining the future may be more important than analyzing the past. Companies today are no longer resource-bound, **they are IMAGINATION-BOUND**”

C.K. Prahalad



NEW L&D GOALS:

- Human Agency
- DISCOVERY
- Imagination
- Intuition
- Compassion
- Empowerment
- Resilience & Agility
- Unorthodoxy
- Creativity
- Entrepreneurship
- Courage





“We are to be architects of the future, not its victims”

(Buckminster Fuller) 