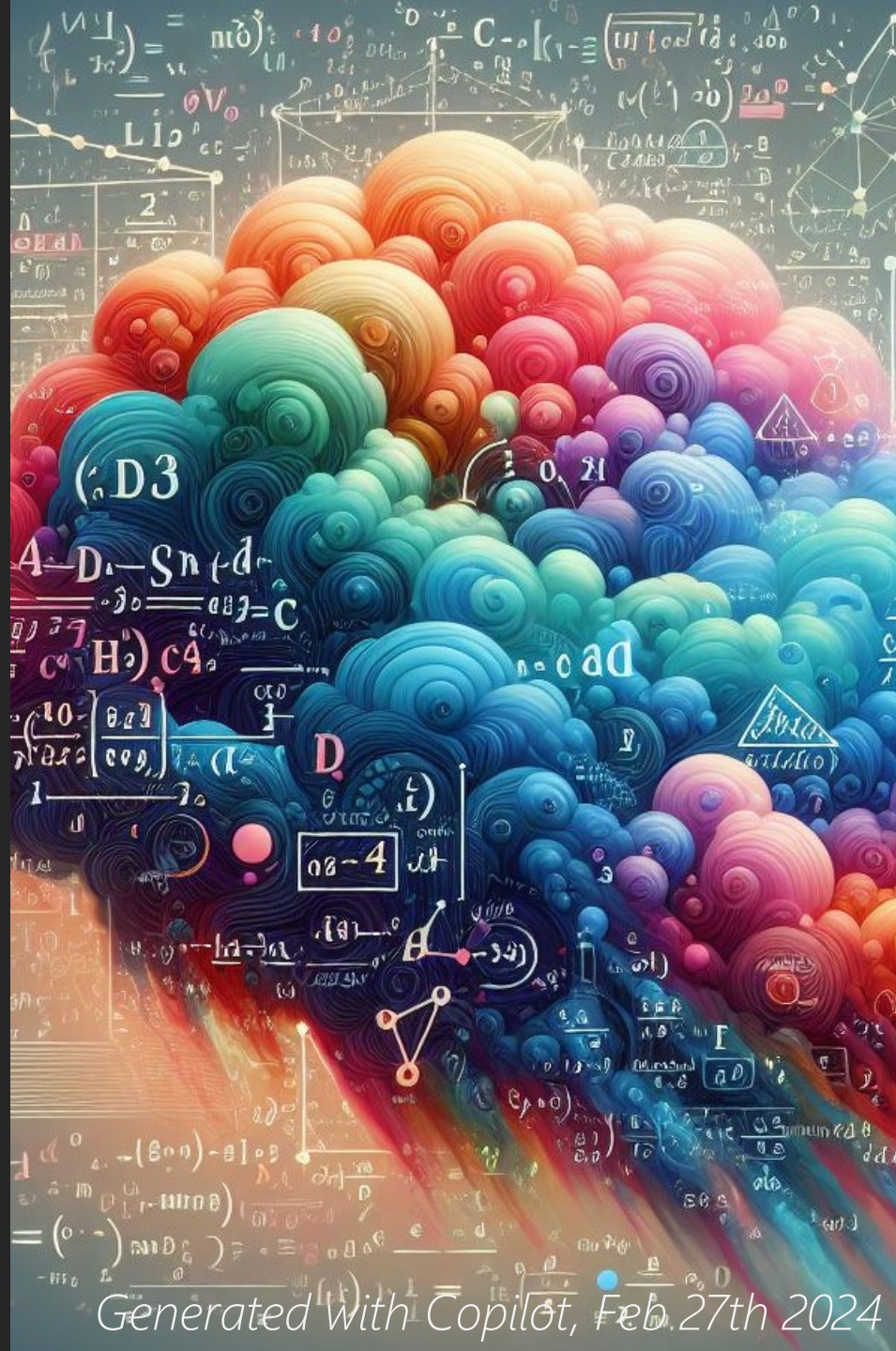
Artificial Intelligence

- beyond the fog of hype and hysteria

Elin Hauge



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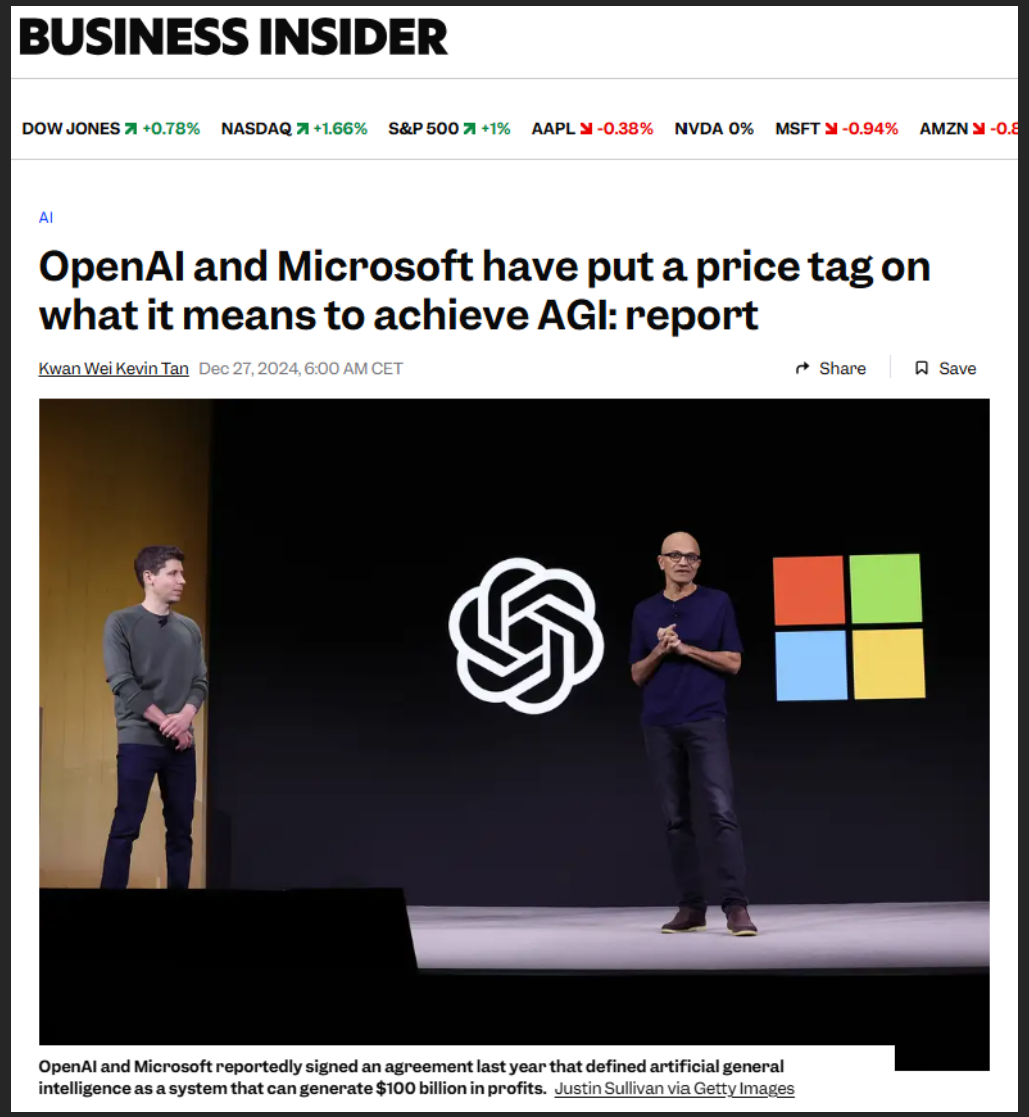
AGI

=

$100bn profit



BUSINESS INSIDER

DOW JONES +0.78% NASDAQ +1.66% S&P 500 +1% AAPL -0.38% NVDA 0% MSFT -0.94% AMZN -0.8

AI

OpenAI and Microsoft have put a price tag on what it means to achieve AGI: report

Kwan Wei Kevin Tan Dec 27, 2024, 6:00 AM CET Share Save

OpenAI and Microsoft reportedly signed an agreement last year that defined artificial general intelligence as a system that can generate $100 billion in profits. Justin Sullivan via Getty Images

$$J = \frac{1}{n}\sum_{i=1}^{n}(pred_i - y_i)^2$$

$$J = \frac{1}{n}\sum_{i=1}^{n}(a_0 + a_1 \cdot x_i - y_i)^2$$

$$\frac{\partial J}{\partial a_0} = \frac{2}{n}\sum_{i=1}^{n}(a_0 + a_1 \cdot x_i - y_i) \implies \frac{\partial J}{\partial a_0} = \frac{2}{n}\sum_{i=1}^{n}(pred_i - y_i)$$

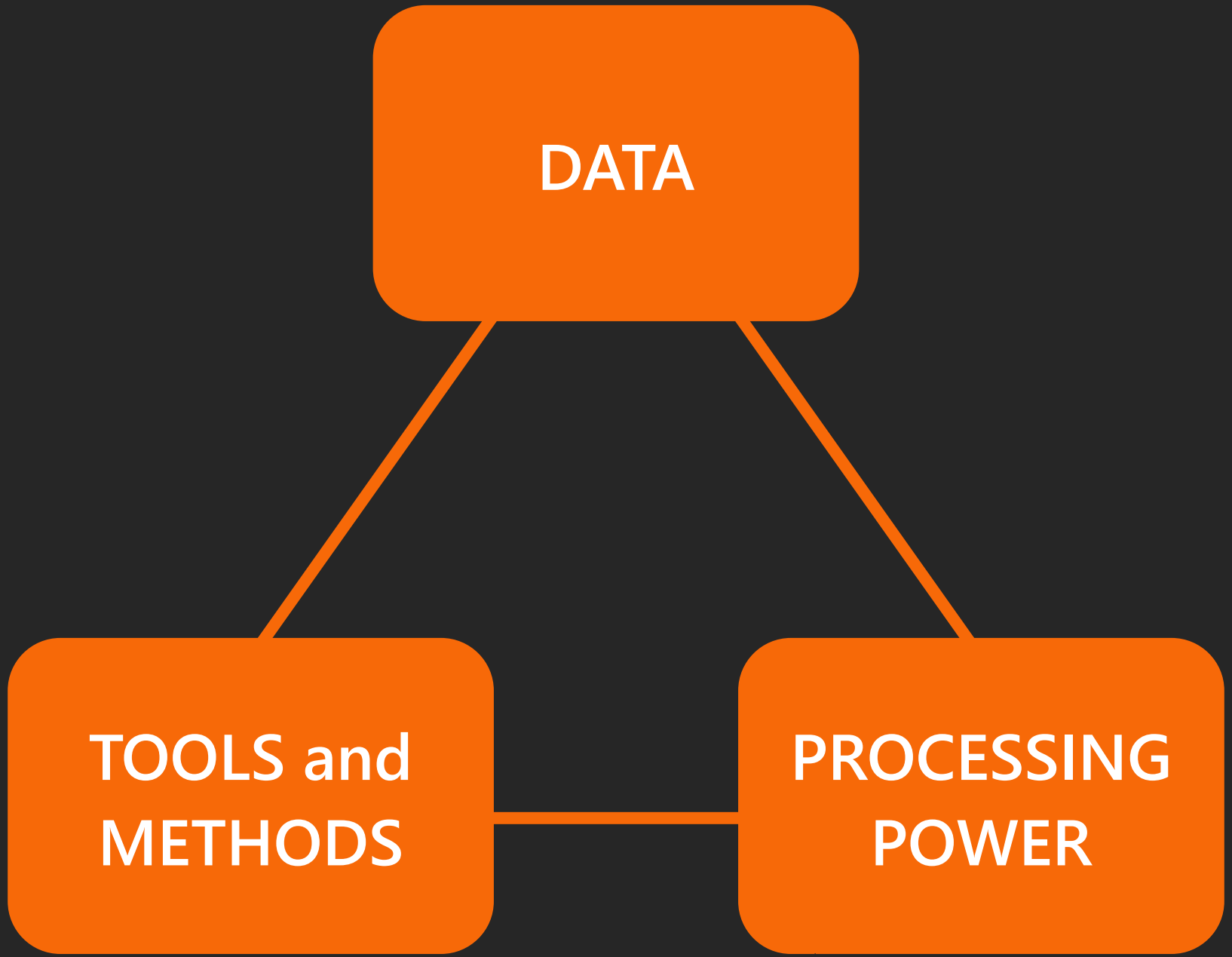
$$\frac{\partial J}{\partial a_1} = \frac{2}{n}\sum_{i=1}^{n}(a_0 + a_1 \cdot x_i - y_i) \cdot x_i \implies \frac{\partial J}{\partial a_1} = \frac{2}{n}\sum_{i=1}^{n}(pred_i - y_i) \cdot x_i$$

AI Act, Chapter 1, Article 3:

'AI system' means

a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.

Artificial Intelligence
Digital Transformation
Big Data


DATA
TOOLS and METHODS
PROCESSING POWER

INTERPRETATION → PREDICTION → GENERATION

The gamechanger: Large Language Models (LLMs)

= semantic probabilistic information models

Generated with Copilot, Jan 2025

AI Agents

= prediction models wrapped in software

AI agents

Learning

Adaptable

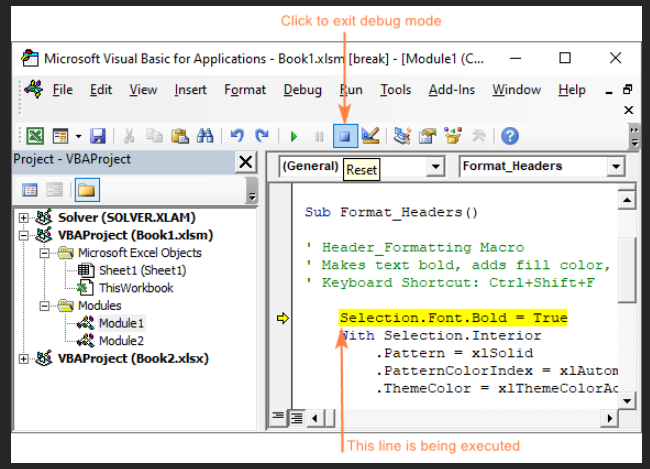
Multi-modal

Autonomous

Chain-of-thought

Agent-to-agent

VB Macros ➡ RPA ➡ AI Agents



Rule-based

Rule-based

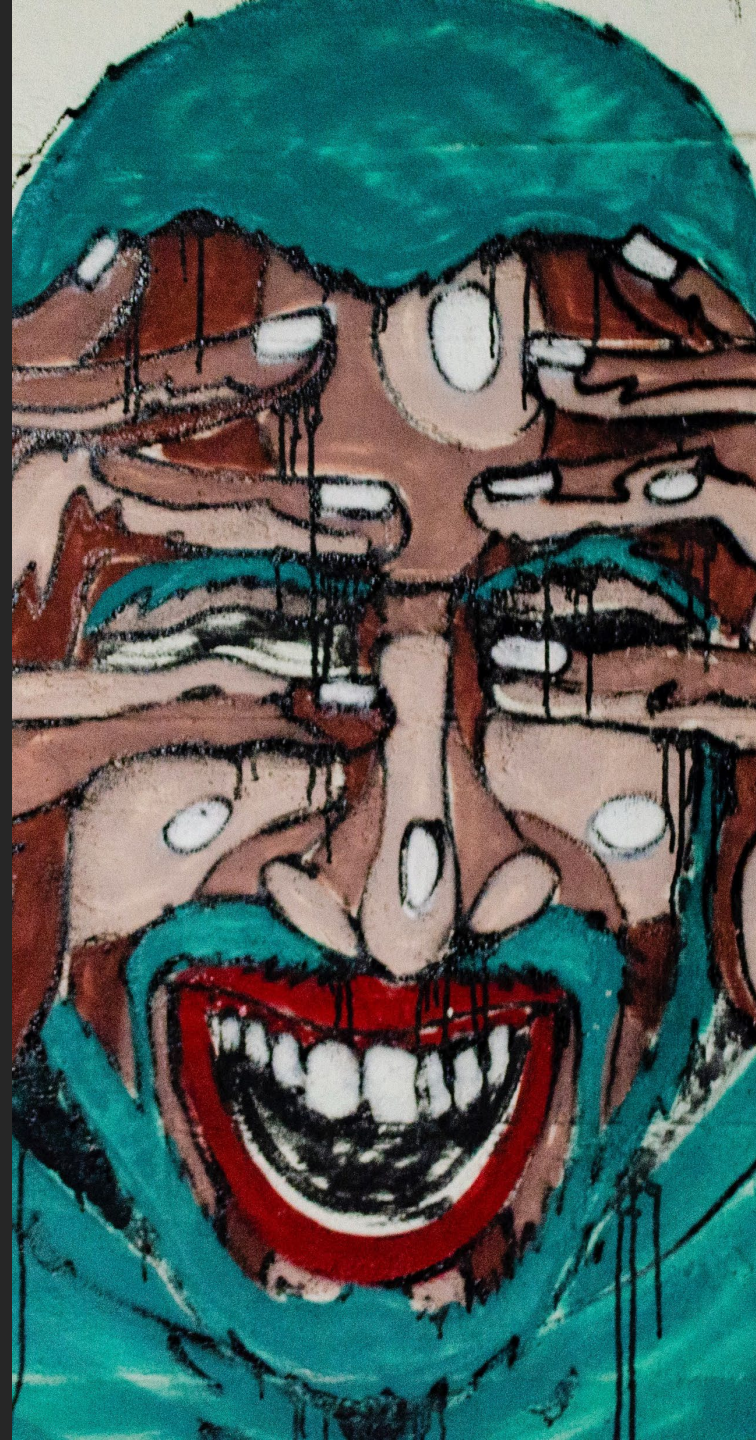
Probability-based

The probabilistic nature of AI:

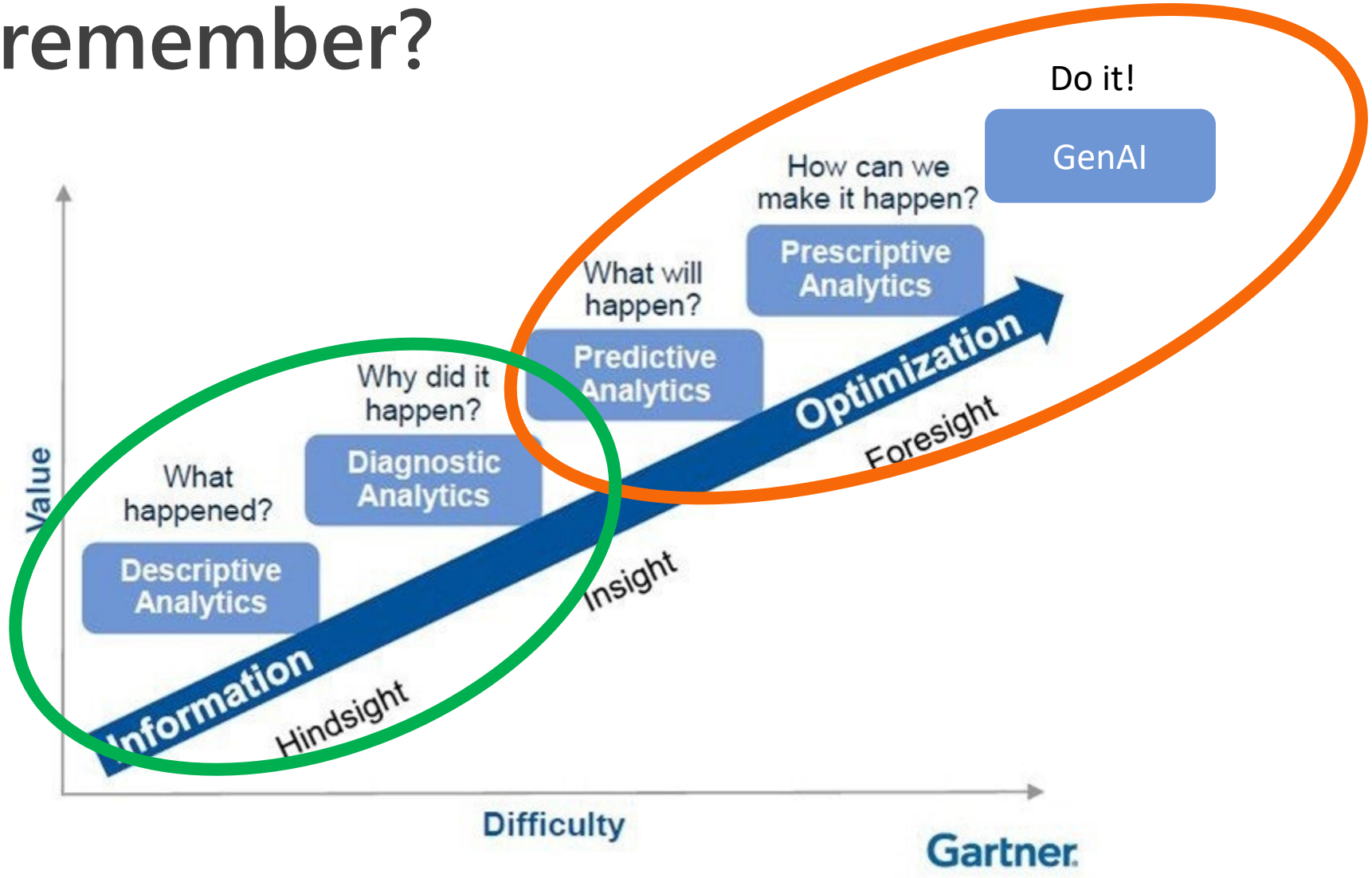
When we want it: CREATIVITY

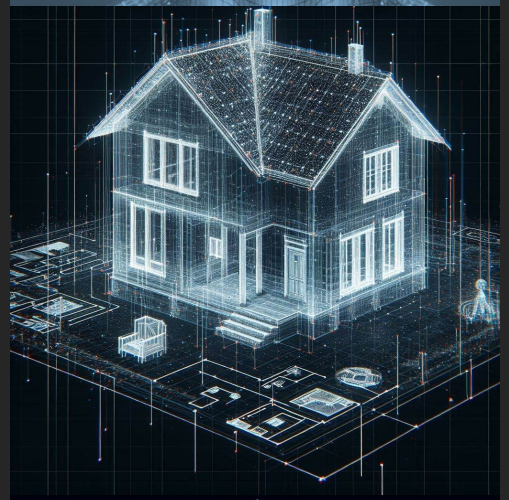
When we don't want it: HALLUCINATIONS (CONFABULATIONS)

The problem? **HUMAN EXPECTATIONS**



Do you remember?





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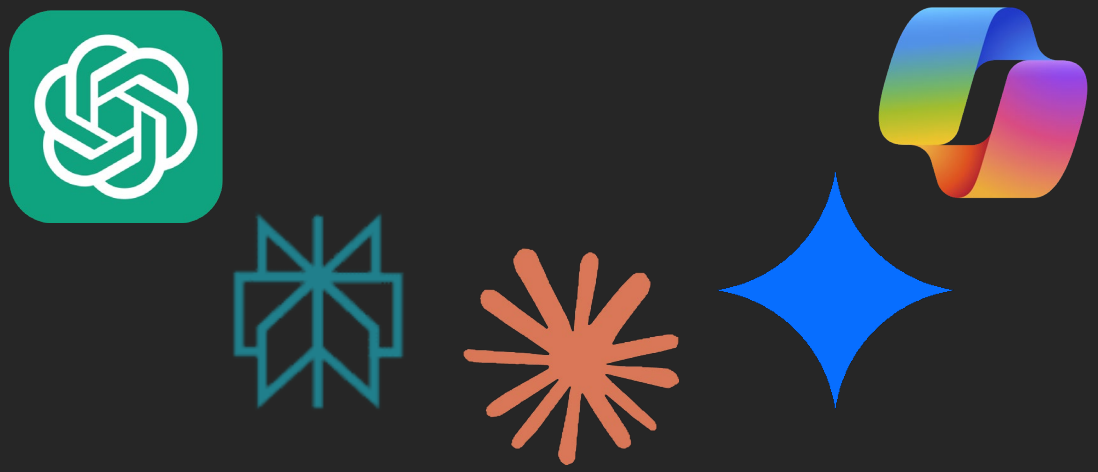
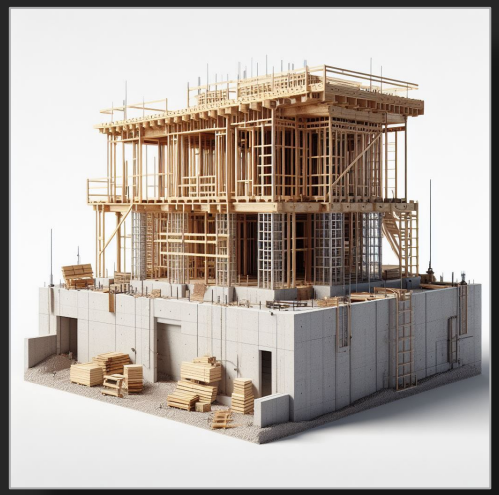
80 / 20

How to succeed with utilising AI for responsible value-creation?

Personal productivity



Enterprise strategy



Enterprise strategy

LLMs as foundations for solutions

to solve complex problems,

automate processes,

and optimise resources.

Generated with Copilot, Oct 24th 2023

DATA

… availability

… quality

… integrity

… security

… consents

Bias

- a reflection of the world as it was

Automate the process,

humanise the touch.

96%

of executives expect AI to

INCREASE productivity

The Upwork Research Institute, 2024

77%

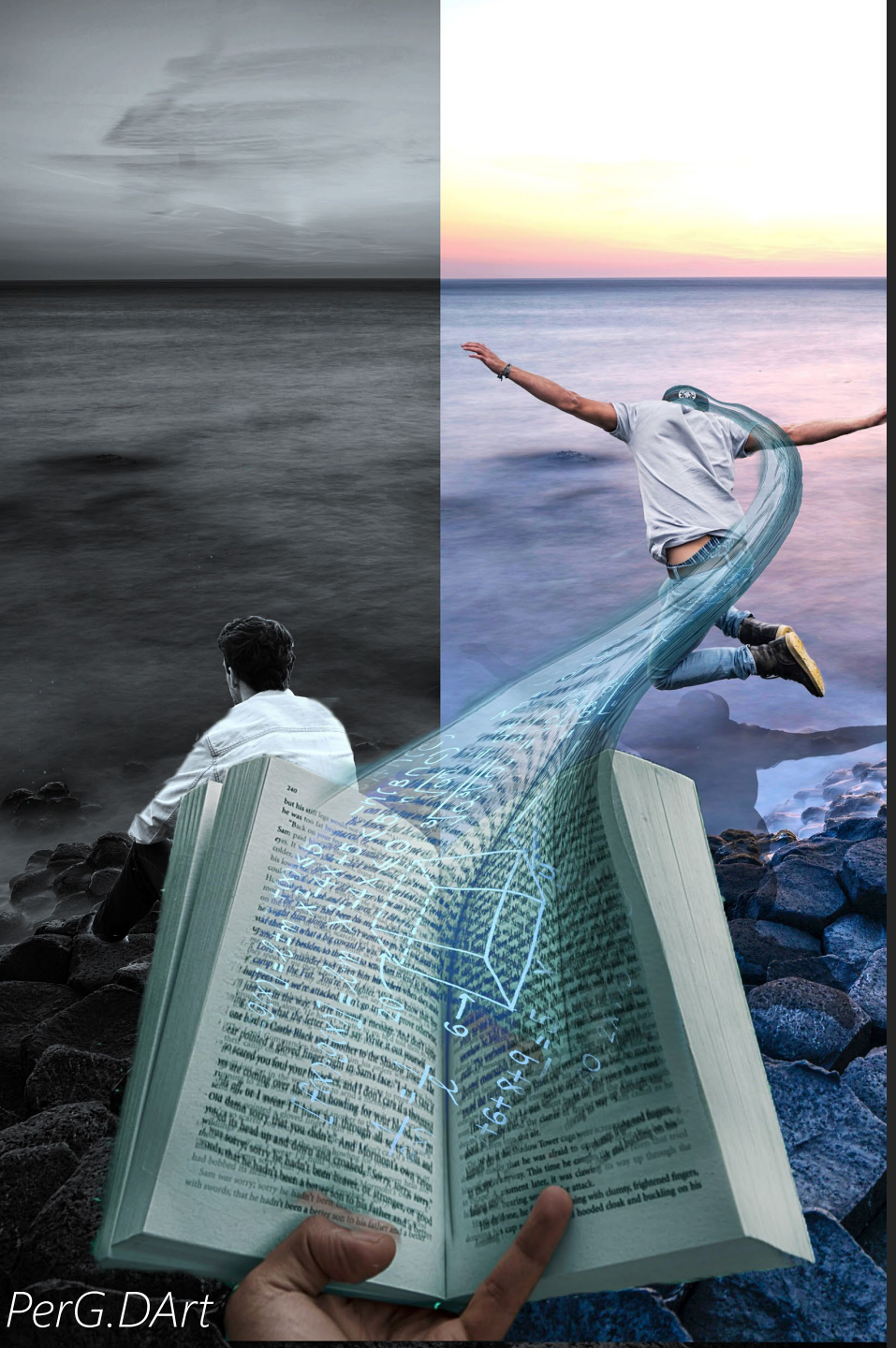
of employees experience

REDUCED productivity

The Upwork Research Institute, 2024

QUESTION:

How many executives are personally using AI tools for work on a weekly basis?



AI literacy

starts at the top

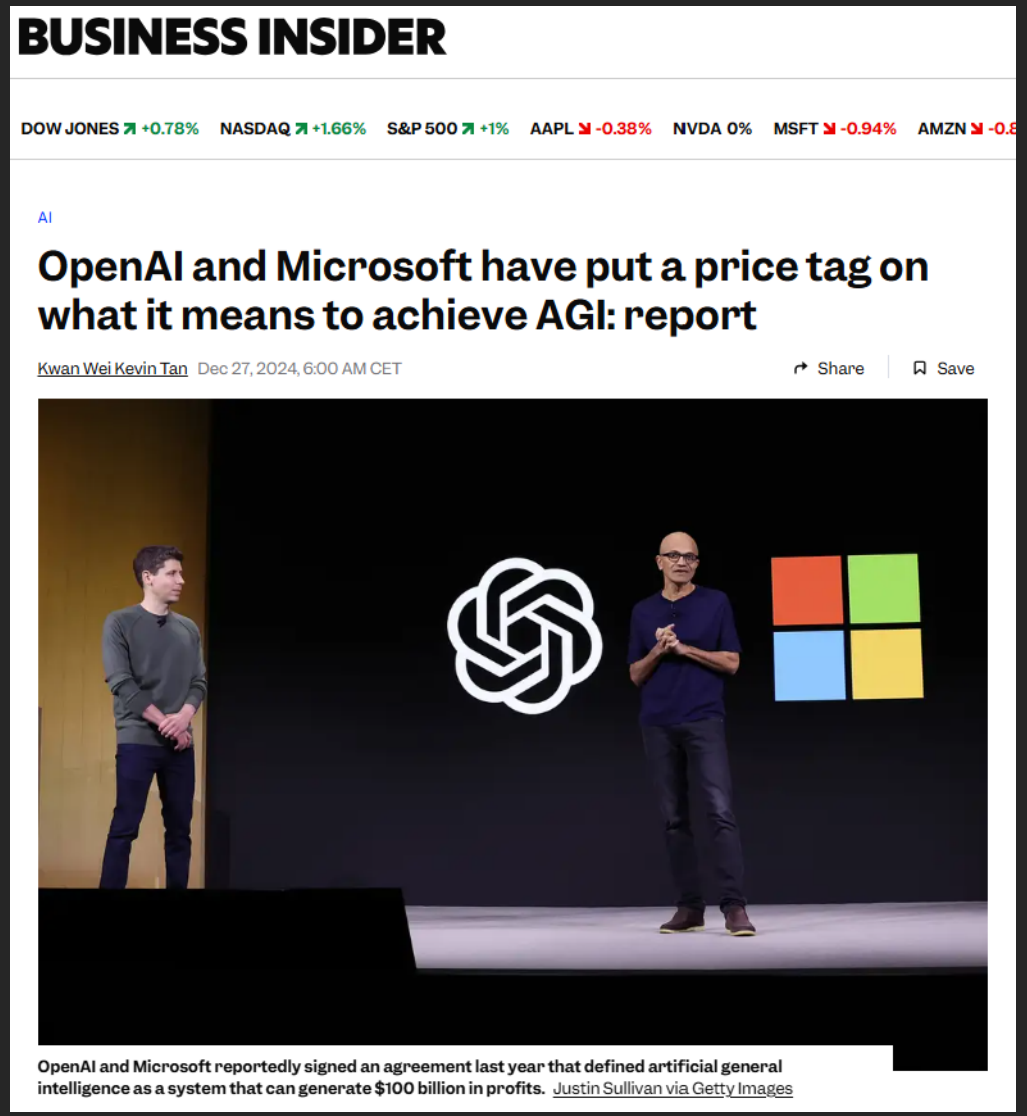
Looking ahead...

Photo by Mathilda Khoo on Unsplash

AGI will be achieved

....and most of us

won't really care



Everywhere

Job loss/creation
is a question of
role understanding

US Cyber Command told to ‘stand down’ operations involving Russia

The United States Secretary of Defense reportedly told Cyber Command to cease all planning and offensive cyber operations against Russia as part of a shift closer to Vladimir Putin.

David Hollingworth • Mon, 03 Mar 2025 • SECURITY

SHARE

ELIN HAUGE

“Powered by AI”:

Warfare

“Drill baby, drill!”

Water shortage

Conflict zone mining

Toxic e-waste

Massive consumption

AI is the natural next step

AI for good is YOUR responsibility

AI is a powerfull toolbox

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