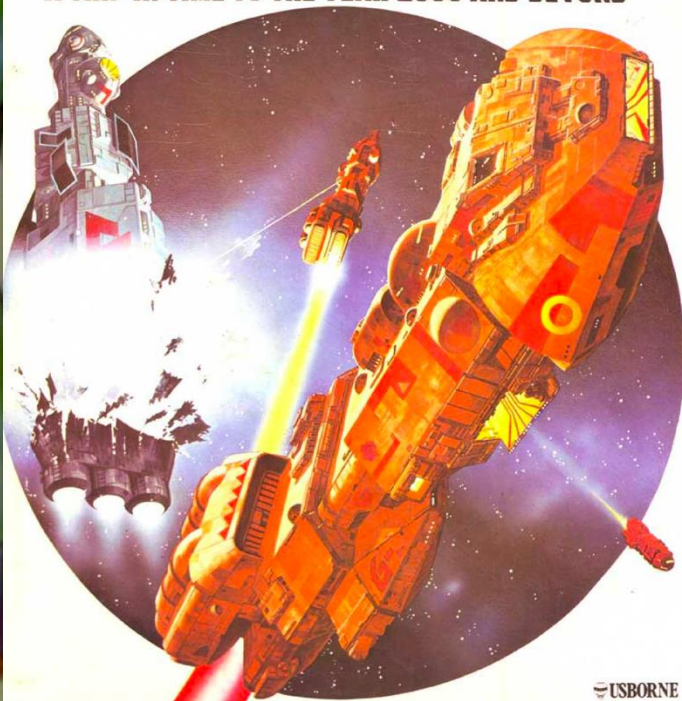


Facing Our Futures



NIKOLAS
BADMINTON

THE USBORNE BOOK OF
THE FUTURE
A TRIP IN TIME TO THE YEAR 2000 AND BEYOND



USBORNE



hope





XEROX®

PARC





what if...

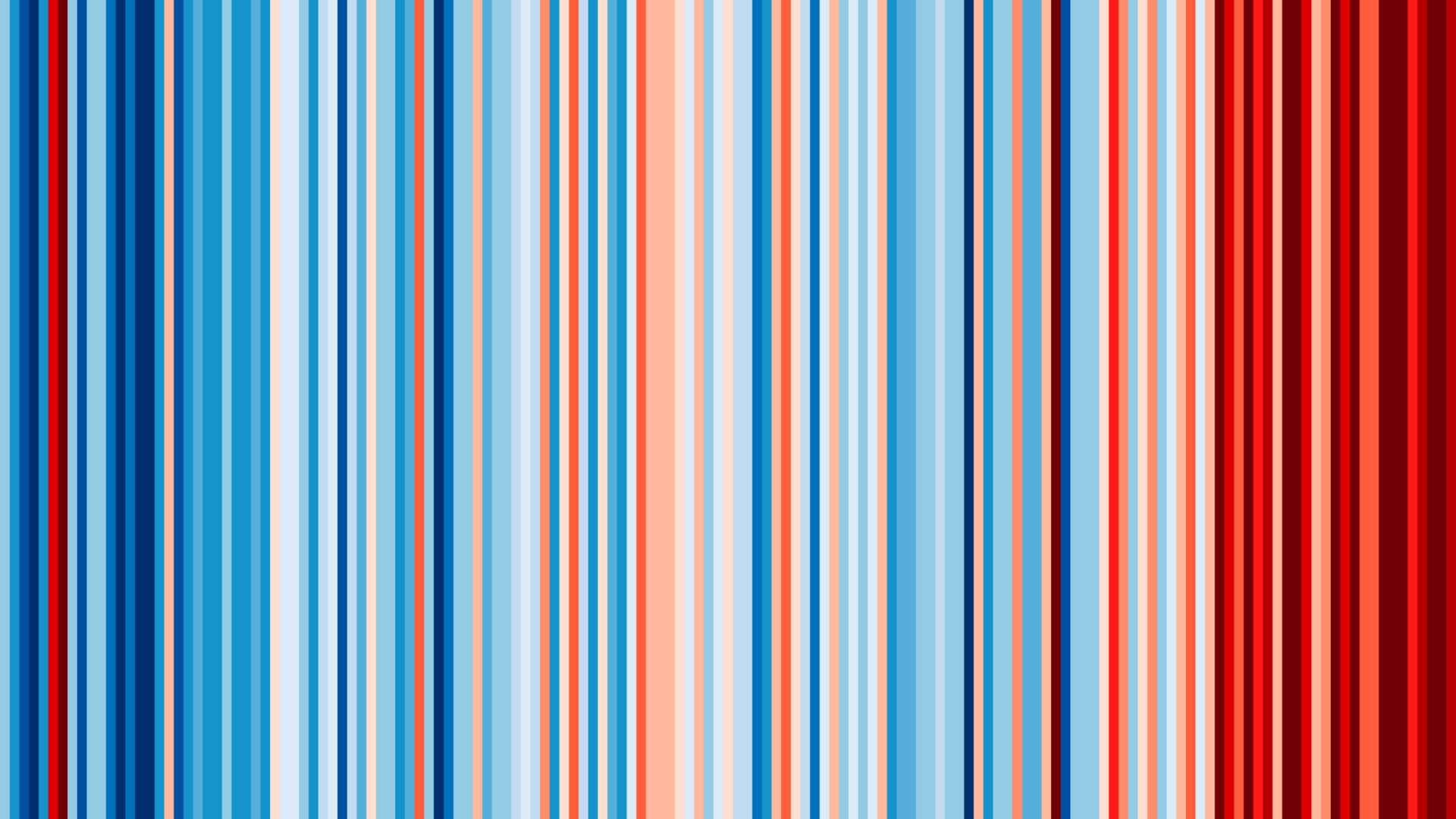
Global Megatrends



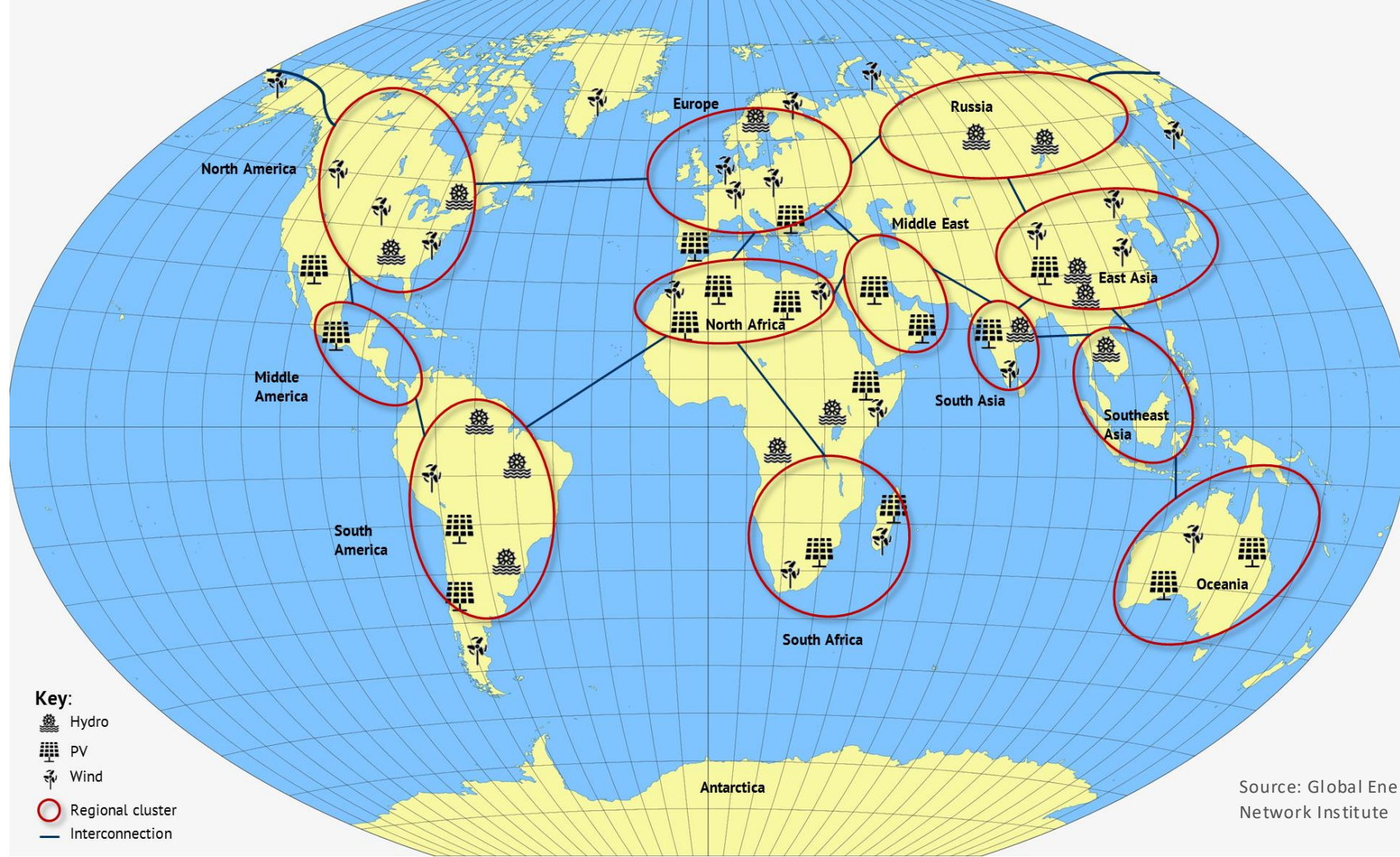
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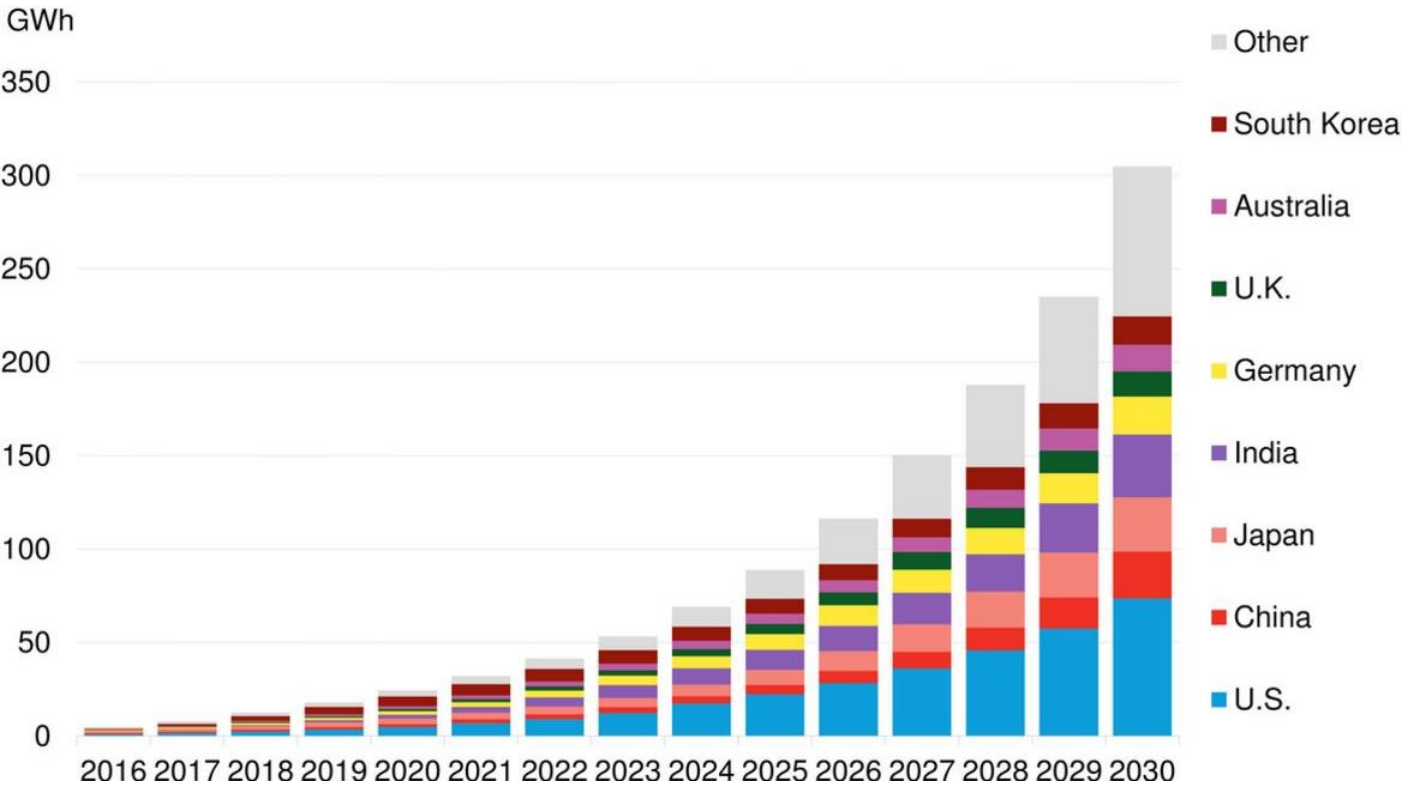






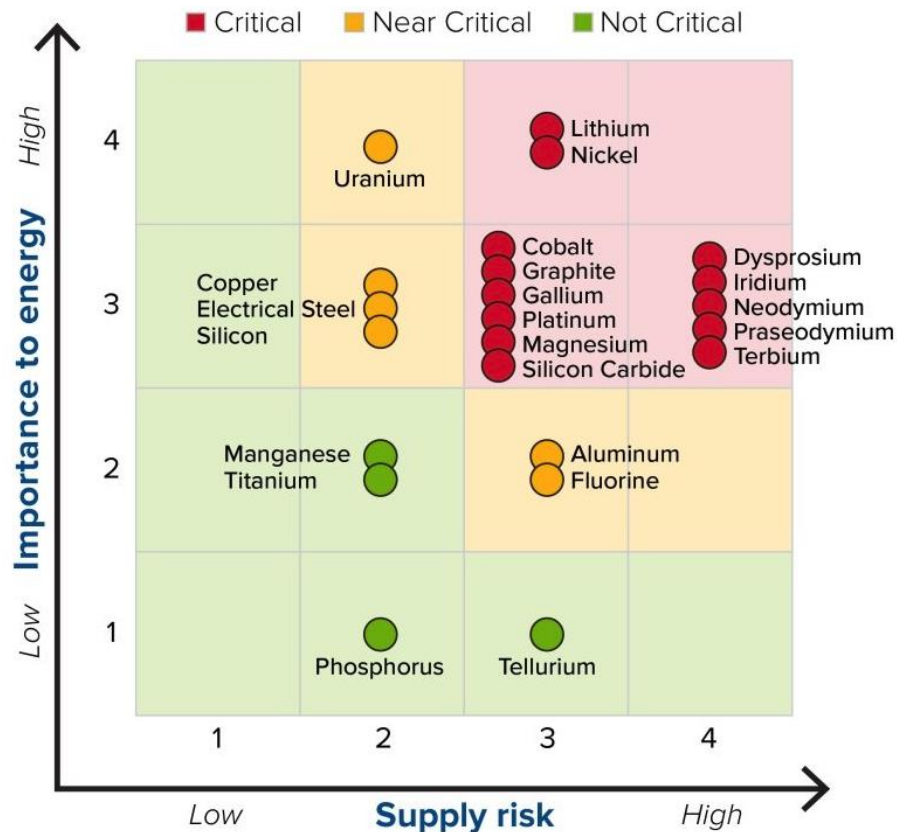
Source: Global Energy
Network Institute

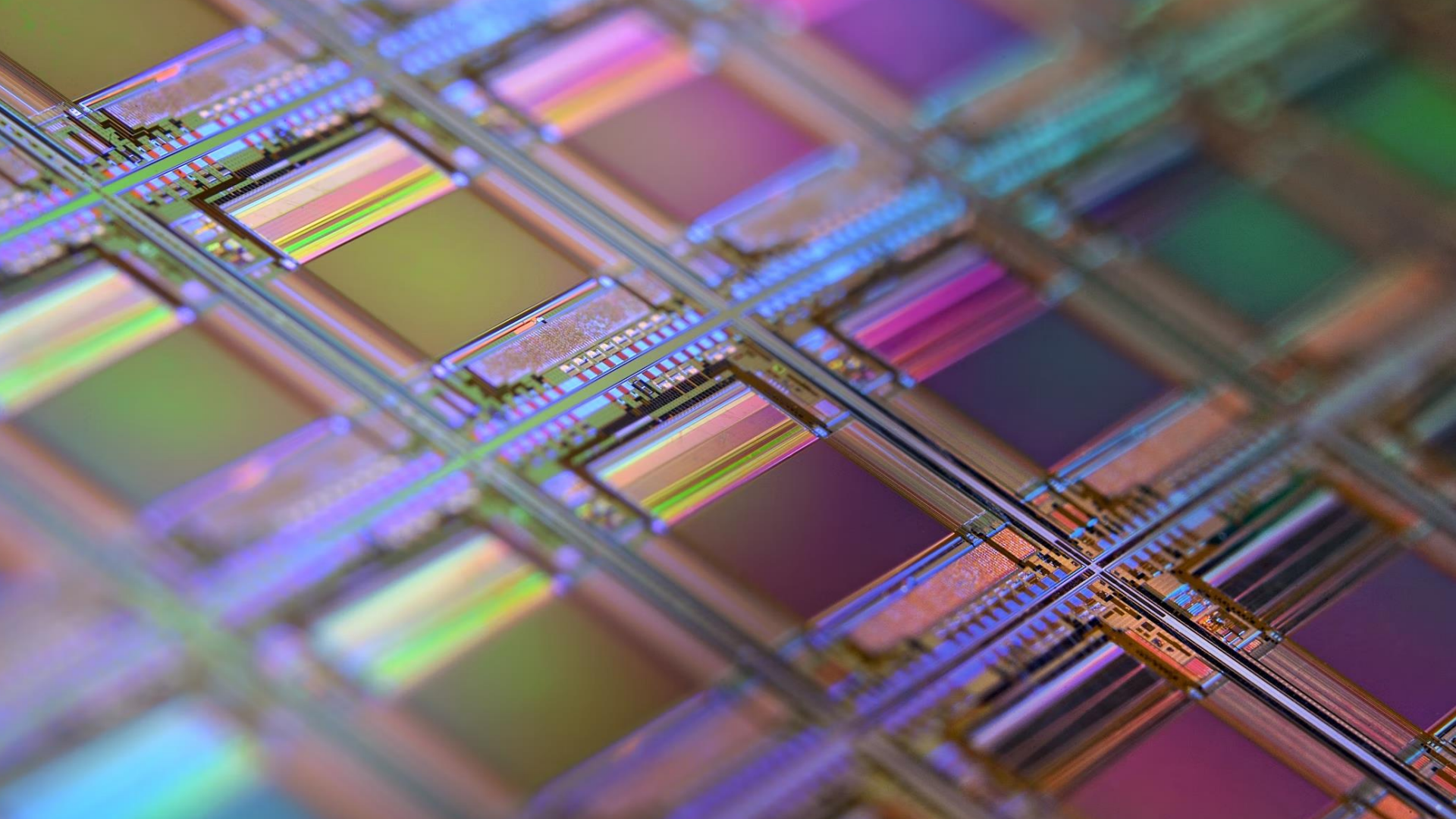
Global Storage Market to Double Six Times by 2030



Source: Bloomberg NEF

The 'Electric 18' supply risk (2025 to 2035)



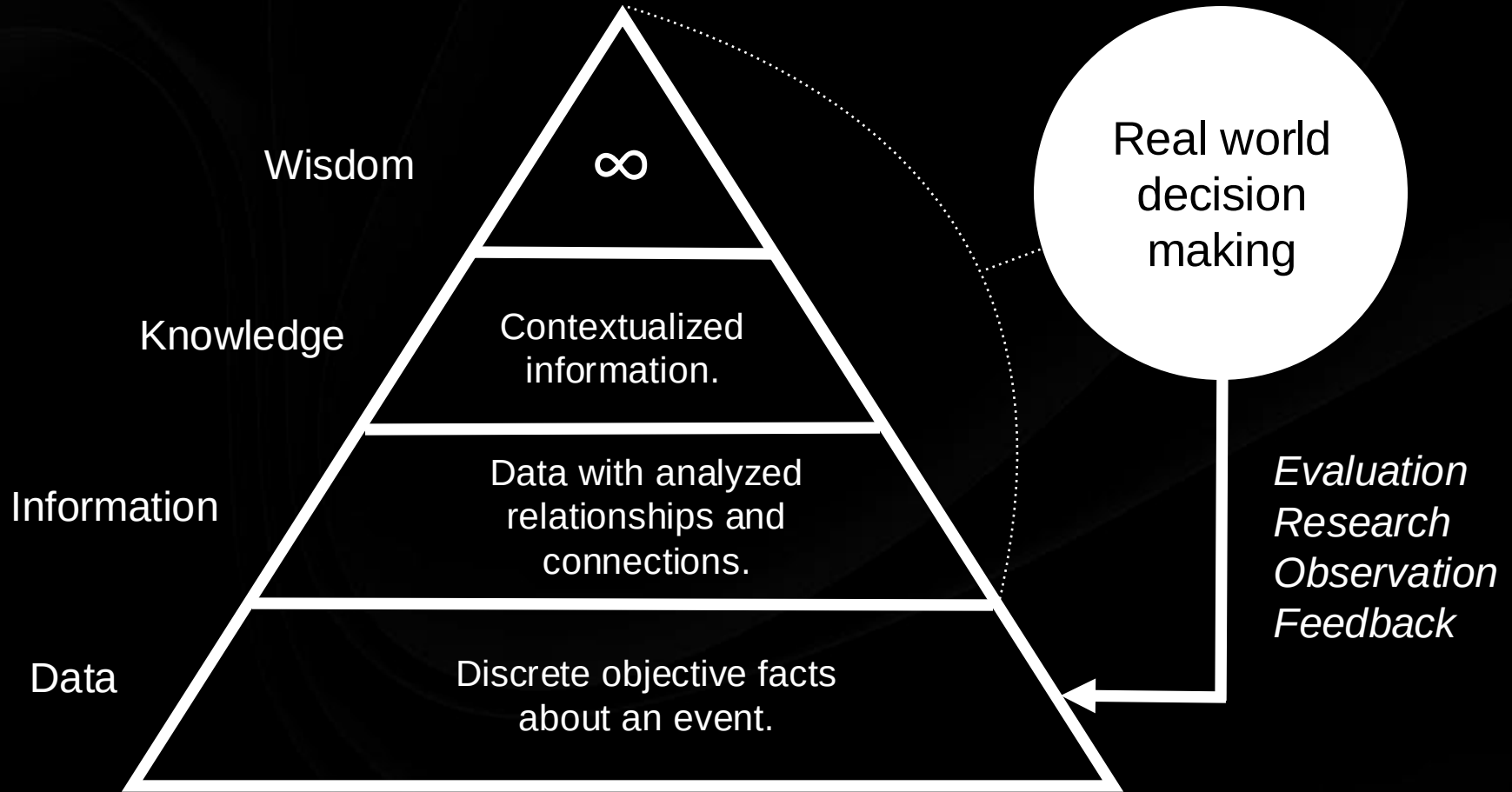


**What if... we plan for
shifting global dynamics?**

Algorithmic Evolution

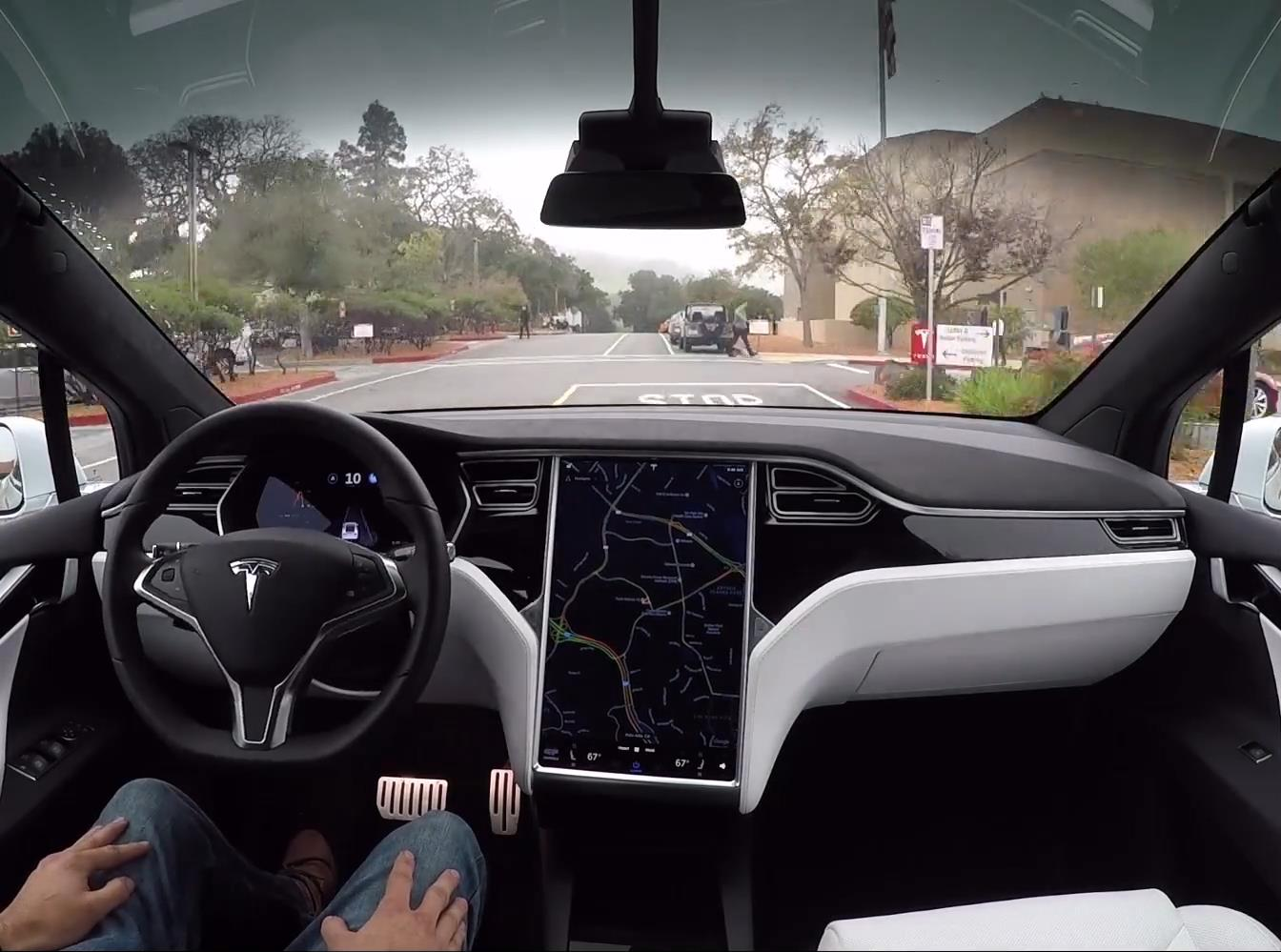


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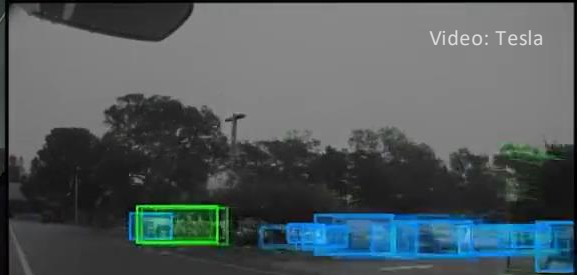


1000x

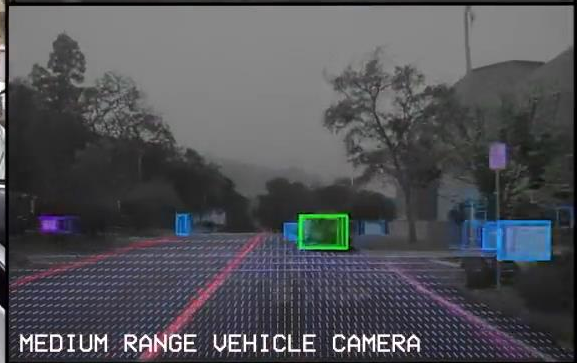
More data by 2050 (50,000 zb)



Video: Tesla



LEFT REARWARD VEHICLE CAMERA



MEDIUM RANGE VEHICLE CAMERA



RIGHT REARWARD VEHICLE CAMERA

MOTION FLOW

LANE LINES

LANE LINES

ROAD FLOW

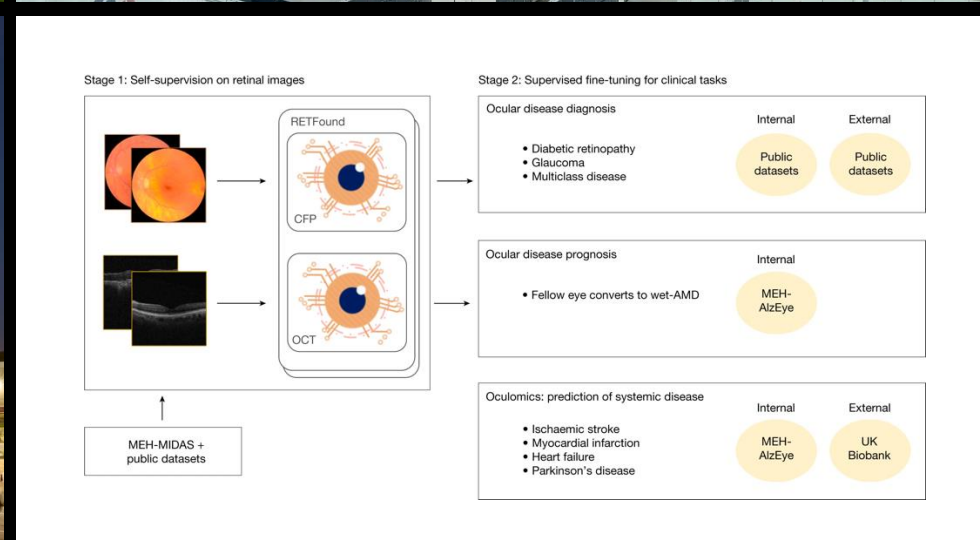
IN-PATH OBJECTS

ROAD LIGHTS

OBJECTS

ROAD SIGNS









generative intelligence

Generative AI Market Map

RESEARCH

Model Infrastructure

OpenAI stability.ai cohere ANTHROPIC AI21labs Hugging Face generally intelligent RAIN craiyon

Midjourney DeepMind Inflection Adept CONJECTURE EleutherAI Lighton CROMA

TEXT

Copyediting/Marketing

Jasper copy.ai Writesonic Rytr anyword LINK Bertha.ai sudo.write wordtune Hypotenuse AI regie.ai CONTENDA OTHERSIDE AI WRITER HyperWrite COMPOSE AI LEX LAIKA Moonbeam frase copysmith Clickable letterdrop Peppertype.ai Simplified Omneky

Chatbots

Character.AI inworld heyday chai ConvaI alethea generate Repha circle labs Quickchat

Knowledge Organization

mem glean Rewind ought Omniscience BearlyAI metaphor

Search Engine

YOU Andi

Education

Speak

Sales/Customer Support

Outplay Smartwriter.ai Cohere Twain Creatext Typewise XOKind CRESTA LAVENDER KAIZAN

Legal

Harvey PatentPal

Narration

NovelAI DUNGERN Subtext

Productivity

motion* reclaimai

Models: ChatGPT (OpenAI Dec 2022), ACT-1 (Adept Sep 2022), Bloom (Hugging Face Aug 2022), Jurassic-X (AI21 Labs May 2022), PaLM (Google Mar 2022), Chinchilla (DeepMind Mar 2022), GPT-J (EleutherAI May 2021), GPT-3 (OpenAI June 2020)

IMAGE

Image Generation

OpenAI stability.ai Midjourney ROSEBUD.AI OpenArt Bertha.ai Jasper image.space KREA playground artbreeder Picsart SPELLRUSH PhotoRoom Aragon

Image Database

Lexica Nyx gallery LORIC AI ROSEBUD.AI

Selfies/Avatars

AVATAR AI PRISMA LABS ProfilePicture.AI OASIS

3D Images

KAEDIM mirage blackshark.ai HYPOTHETIC CSM Spline

Design

Diagram alpaca Poly VIZCOM uizard

Fashion

LALALAND CALA

Consumer

INTERIOR AI

Material

Barium4

Models: Midjourney (July 2022), Stable Diffusion (StabilityAI Apr 2022), DALLÉ-2 (OpenAI Apr 2022)

VIDEO

Video Generation/Editing

runway WOMB0 descript OPUS ROSEBUD.AI

Digital Humans

synthesia Rephrase.ai Mario Colossyan Hour One. Synths Video elai.

Avatars/Motion Capture

Kinetix DEEPMOTION RADICAL STUDIOS plask

Personalized Videos

tavus Rephrase.ai

Media

Models: Make-A-Video (Meta Sep 2022), Imagen Video (Google Oct 2022)

AUDIO

Synthetic Voice

SONANTIO VOICEMOD PolyAI REPLICA coqui WELLSAID readspeaker.ai Listnr Fliki podcast.ai DUBVERSE RESEMBLE.AI Dubverse

Music

soundful USICO SONIFY Mubert Alva SPLASH boomy

Models: Whisper (OpenAI Nov 2022), data2vec (MetaAI Jan 2022), Jukebox (OpenAI Apr 2020)

CODE

Coding Assistant

replit tabnine cogram GitHub Copilot MUTABLEAI Hugging Face

Documentation

Mintlify Stenography

Web App

Debuild durable

Data Analysis

seek kubit

Models: CodeGeeX (Tsinghua University Sep 2022), Codex (OpenAI July 2021)

GAMING

NPCs/Avatars

REPLICA rct.ai ROSEBUD.AI charisma.ai Kinetix DEEPMOTION

Game Platforms

latitude The Culture DAO CODEX REGRESSION

Game Assets

mirage KAEDIM

Narration

hidden door AI DUNGERN

Worldbuilding

blackshark.ai

Background Music

soundful Mubert Alva SPLASH

Models: ChatGPT (OpenAI Dec 2022), Imagen Video (Google Oct 2022), Midjourney (July 2022), Stable Diffusion (StabilityAI Apr 2022), Whisper (OpenAI Nov 2022)

BIOTECH

Biomedicine

Generate: Biomedicines Antiverse Ainnocence JURA Bio

Protein Design

evozyne menten.AI Cradle bio ProteinDure

Models: RoseTTAFold Diffusion (UWashington Nov 2022), AlphaFold (DeepMind July 2021)

productivity 

productivity 
critical thinking 
quality 

productivity 
critical thinking 
quality 
augmentation



Search...



FITZTESTGO

fitztestgo

Edit Profile

PLAN

Free Trial

Expires in 6 days



Get Pro

Get Starter

1 Project

OVERVIEW

STARRED

Filter by name...

All

+ NEW PROJECT



Raspberry Pi Pico | End-to-end AI Design Tutorial [Example]

Learn how to design PCBs faster with generative AI in this 20 minute hands-on tutorial. You'll learn how to use Flux Copilot, an AI-powered hardware design assistant, to res...

fitztestgo 8 days ago

☆ Star

1 Comment



Brainstorm a new project with AI

Learn how to use Copilot, your AI design assistant, to brainstorm and develop a new idea from concept to custom board design. Discuss requirements, generate archite...

Example



ESP32 Robot Controller | AI Design Review Tutorial

Spot the mistake! Learn how to use AI to conduct a design review on an ESP32-based control board. This project is ideal for autonomous or radio-controller robots fe...

Example



Tesla Vehicle Display System | AI Cost Optimization Tutorial

Learn how to optimize your project for cost with this Vehicle Display System project that was open sourced from the Tesla Roadster. Optimizing your BOM for cost can take ...

Example



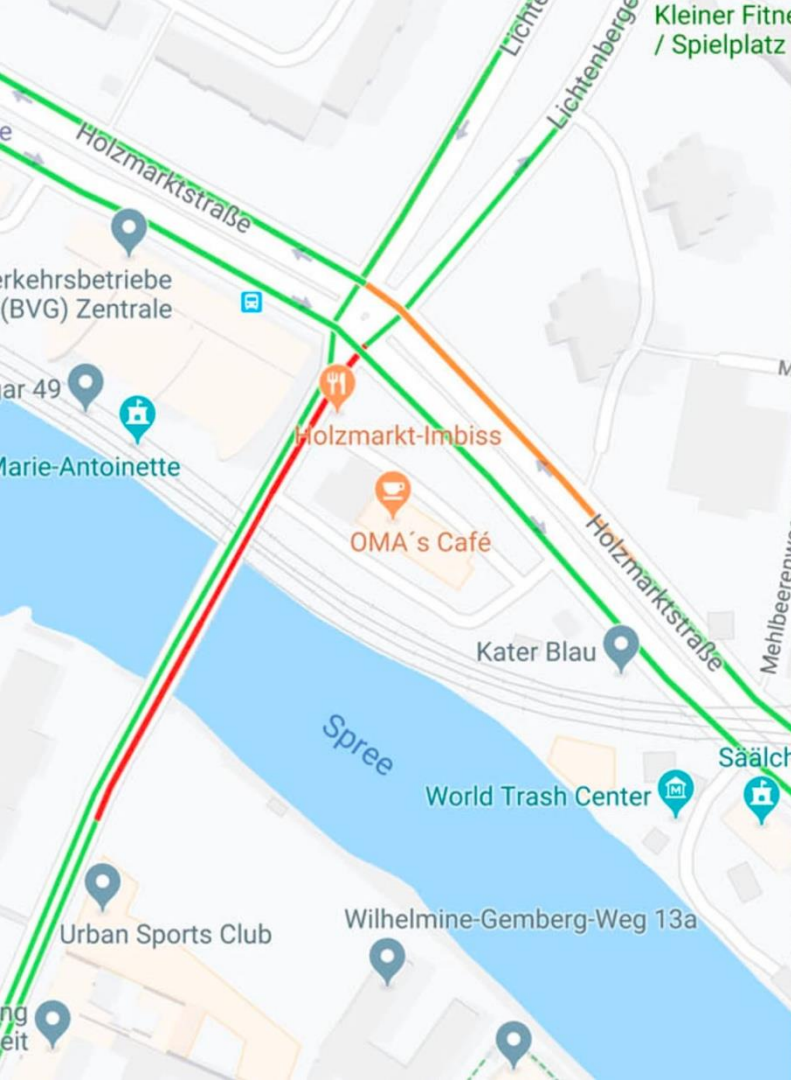


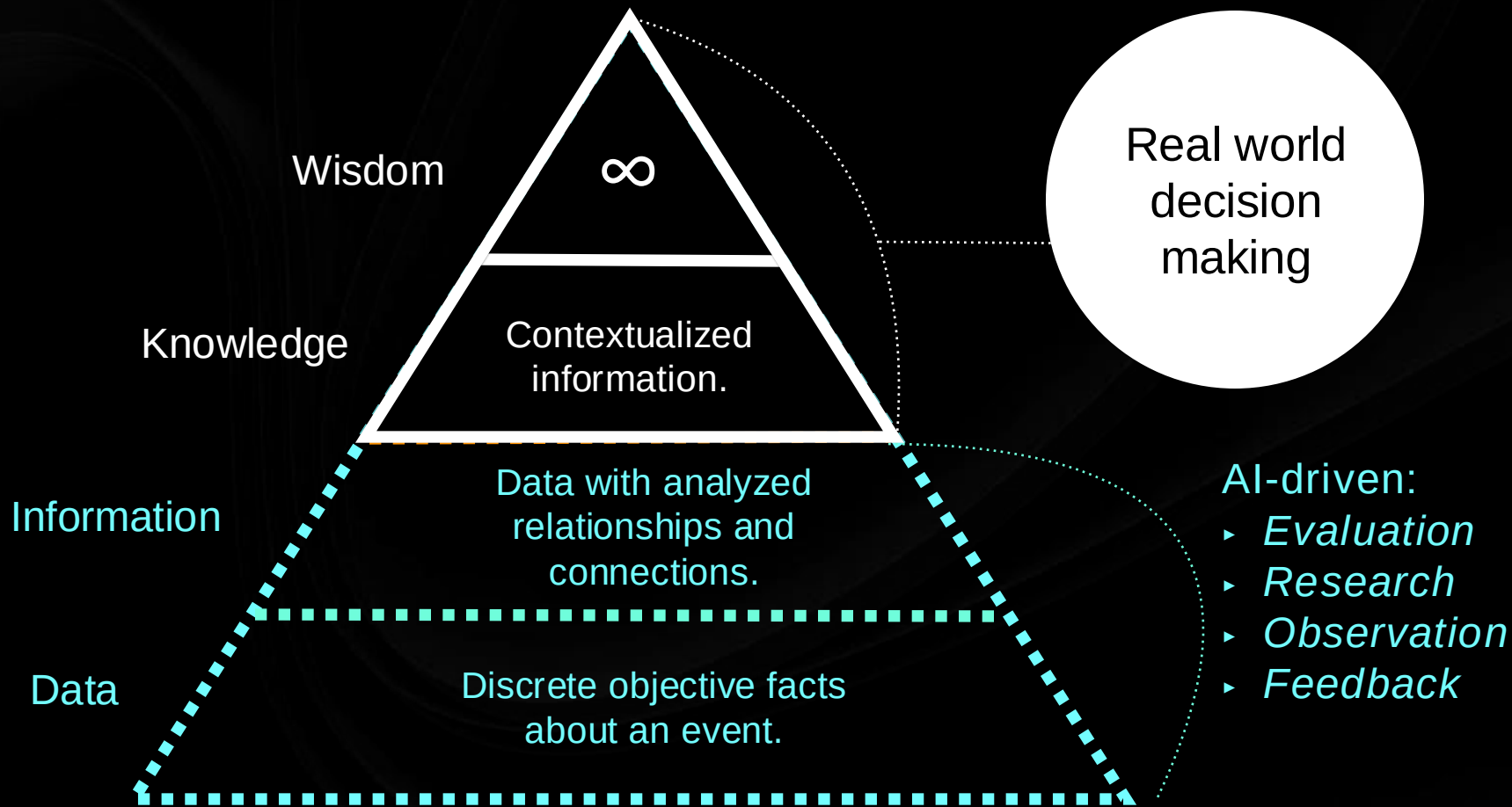
Image: Simon Wekert

“

**Before we can get to
'God-like AI' we'll
need to get through
'Dog-like AI'.**

Yann LeCun

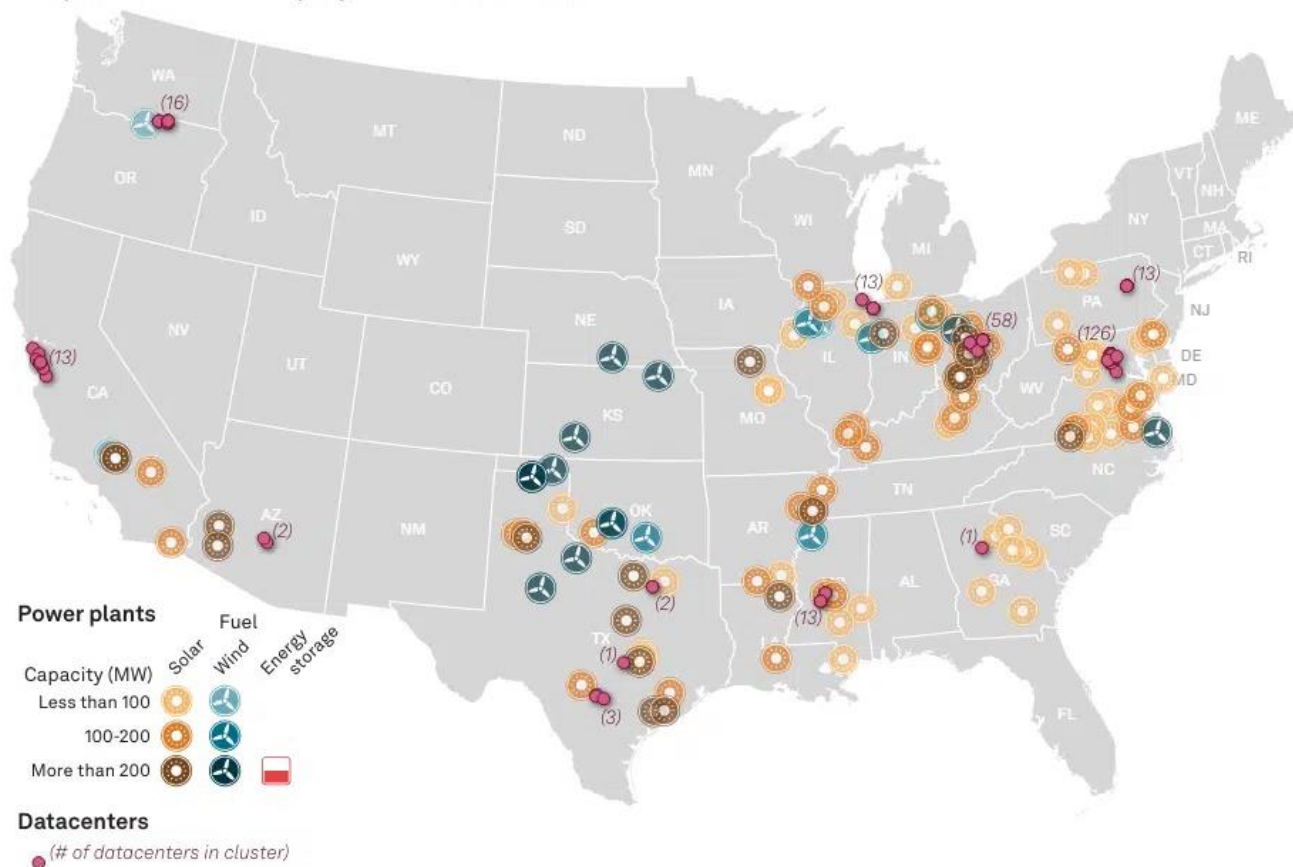




A satellite view of Earth at night, showing the curvature of the planet and the glowing lights of cities and infrastructure across the landmasses. The text is overlaid on the center of the image.

**5,381 data centers in
the United States**

Corporate renewable projects and datacenters



Data as of May 6, 2024.

Datacenter concentrations include operating and planned datacenters.

Map credit: Jonathan Paul Lalgee.

Sources: S&P Global Market Intelligence 451 Research; S&P Global Market Intelligence.

© 2024 S&P Global.

What if... we design
**holistic computing-energy
ecosystems?**

Electronics Ecosystems



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BADMINTON

Barcelona



Songdo



7.8m

gallons of
water saved
every year

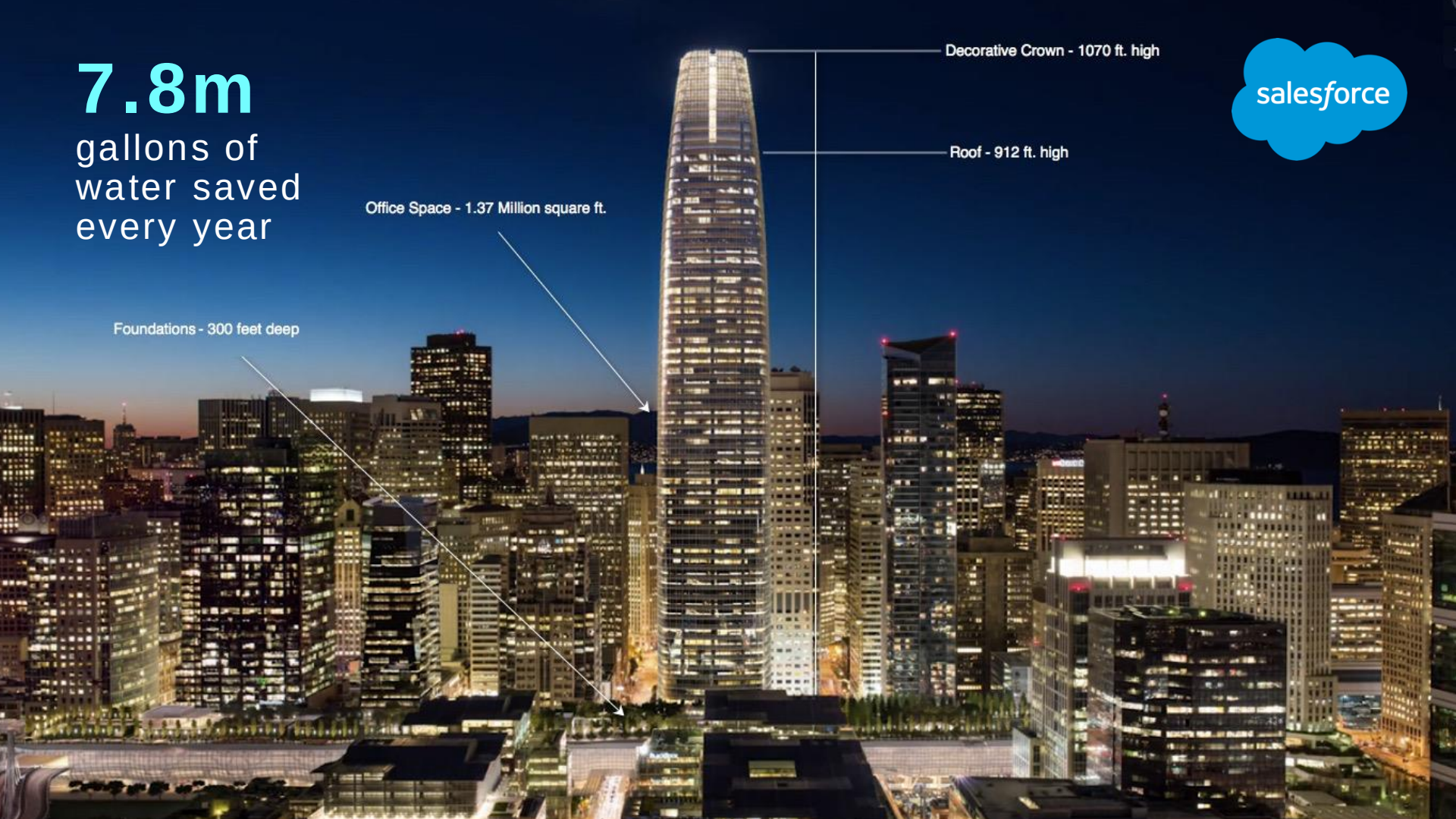
Office Space - 1.37 Million square ft.

Foundations - 300 feet deep

Decorative Crown - 1070 ft. high

Roof - 912 ft. high

salesforce









hyperreality

16220
POINTS - LEVEL 22
SUDO PLAY

*3 LOYALTY BONUS

Bully!
ENTERTAINMENT

LEVEL 22

JOB MONKEY

URGENT

BUY GROCERIES FOR MR D. JUELAO

MAG

PRO REA

MONKEY FOR THE

FOR DOGS

ELDERLY CARE

NICE

SYSTEM UPDATES AVAILABLE

3 NEW MESSAGES

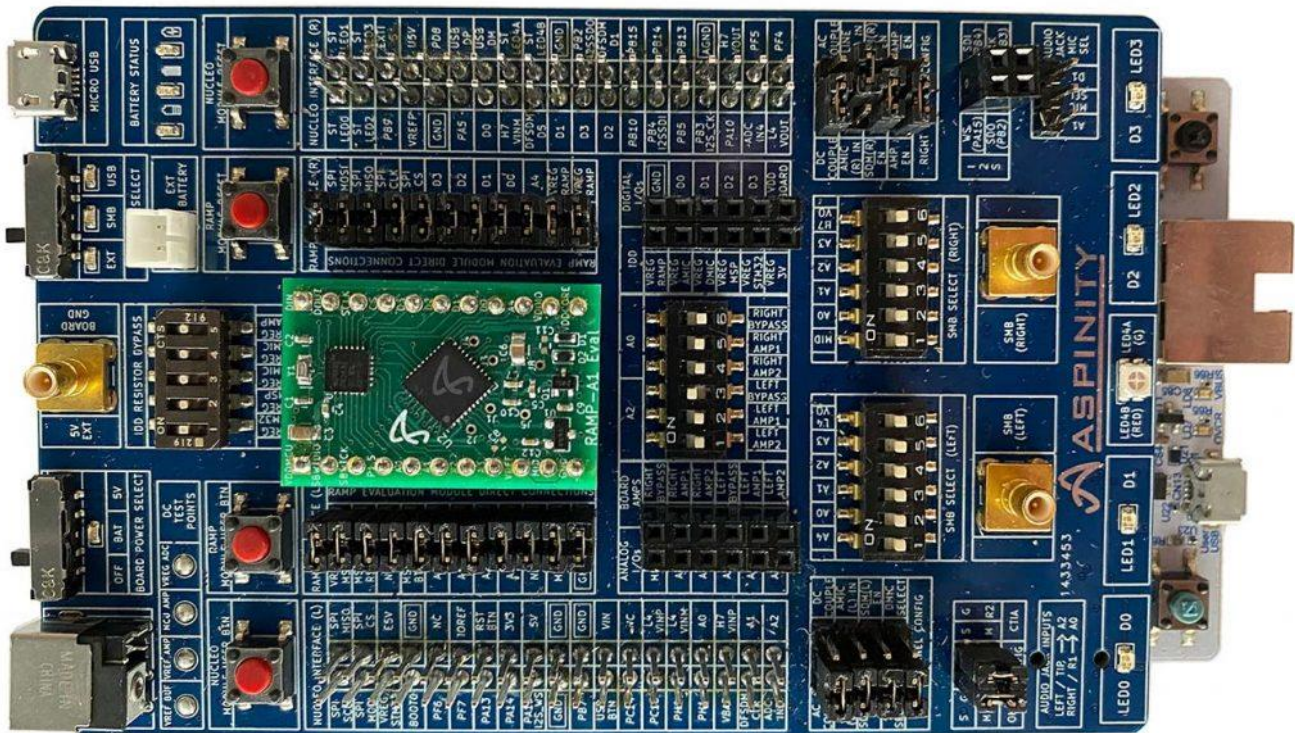
Marly Lopez
Camilo Alvarez
Push here to open your inbox

POINTS MANAGER

JOB MONKEY LEVEL 4

22

medelin



Source: Aspity AnalogML Core @ 25 microamps (μA)

**What if... we anticipate a
diverse electronics
world?**

Circular Mindsets

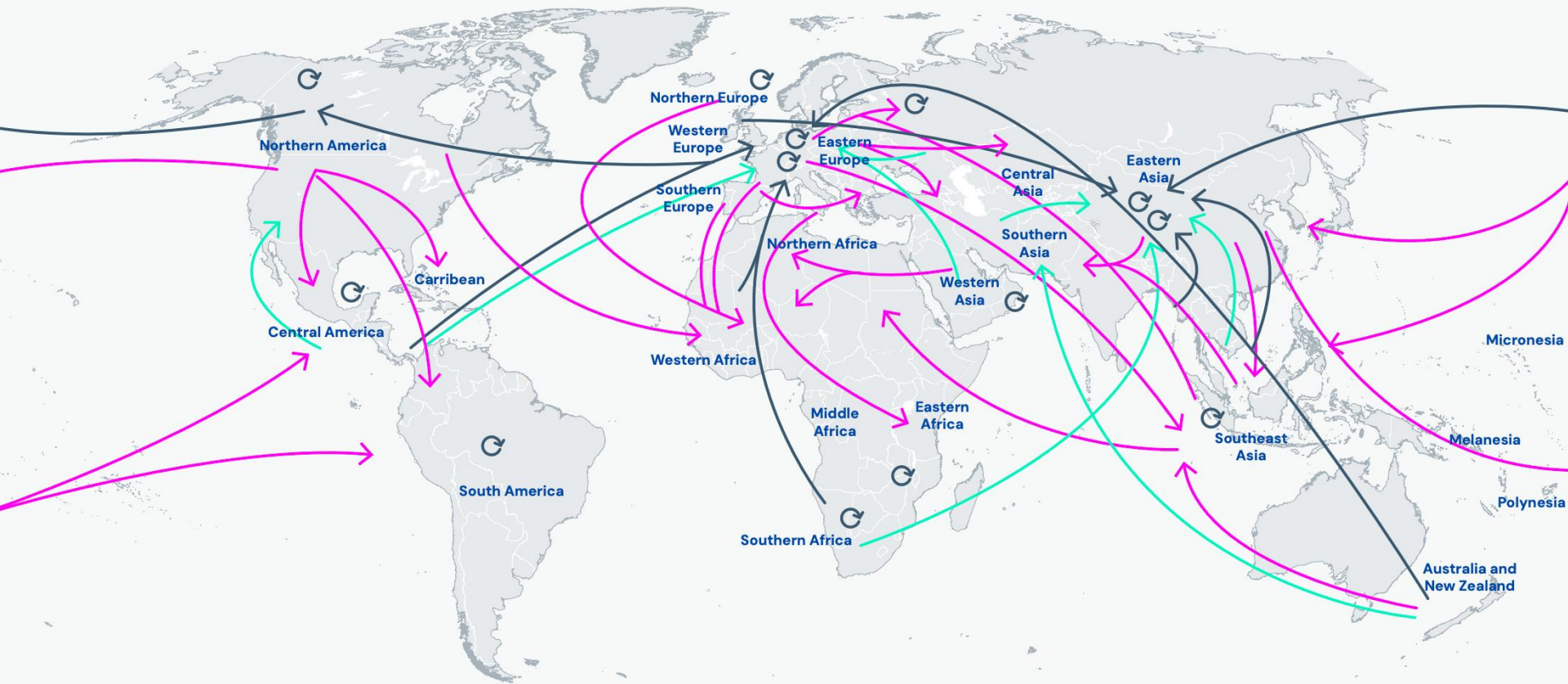


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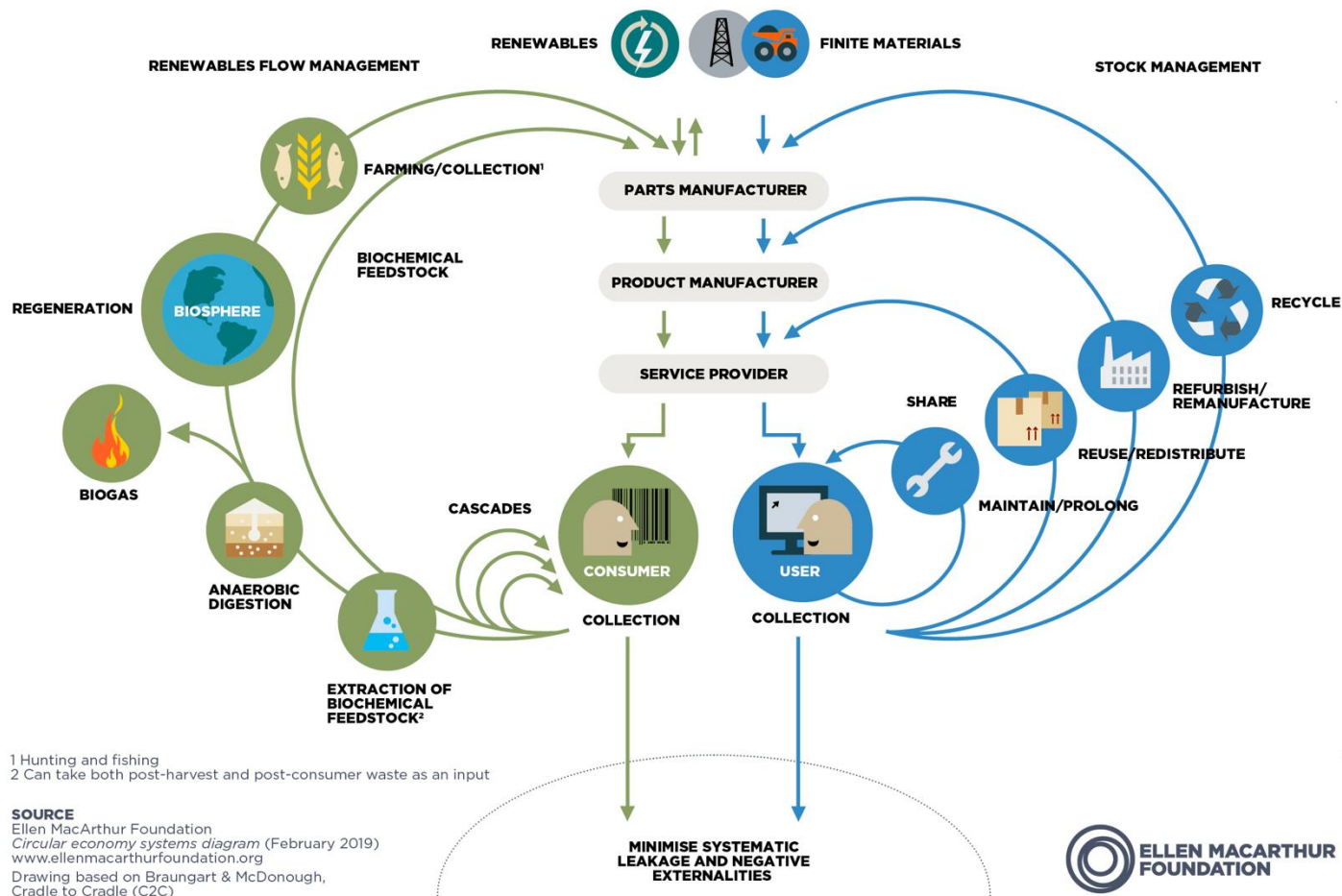
80 m

**metric tons of e-waste* is
expected by 2030 with over three-
quarters of e-waste still going
undocumented**

* 62m metric tons in 2022



- Uncontrolled e-waste used-EEE
- Movement of hazardous e-waste with prior informed consent under Basel Convention
- Printed circuit board waste
- ↻ Flow within the region



- ▶ **Adopt Circular Economy Practices**
- ▶ **Expand Producer Responsibility (EPR)**
- ▶ **Improve Transparency & Supply Chain Ethics**

- ▶ **Improve Transparency & Supply Chain Ethics**
- ▶ **Develop Advanced Recycling Technologies**
- ▶ **Promote Right-to-Repair Laws**

**What if... we motivate the
industry to have
responsibility?**

Relationship Evolution



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77%

of B2B buyers found their purchase experience very difficult or complex, and 95% had to go back and revisit decisions at least once as new information emerges.

80%

of B2B buyer experiences - by 2025 - will be digital, and 33 % of B2B buyers* would like an entirely seller-free sales experience.

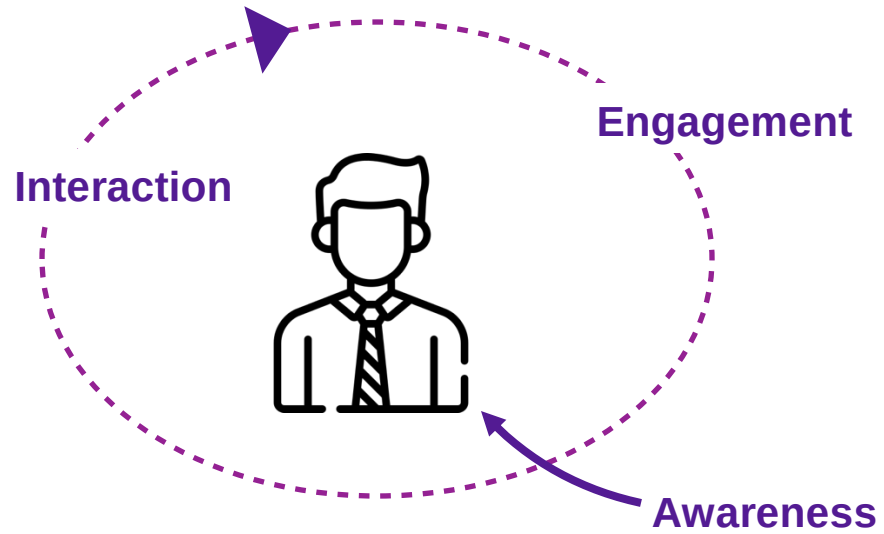
* 44% for millennials.

Trust
Knowledge
Transparency
Availability
Creativity
Service

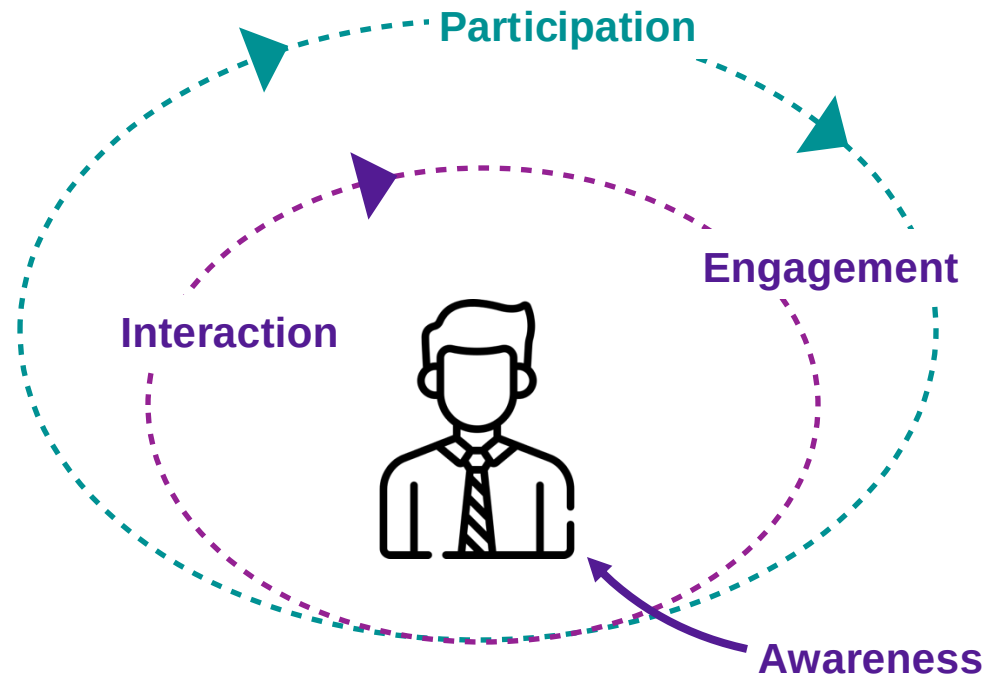
Based on The
Marketing Spiral by
David Armano



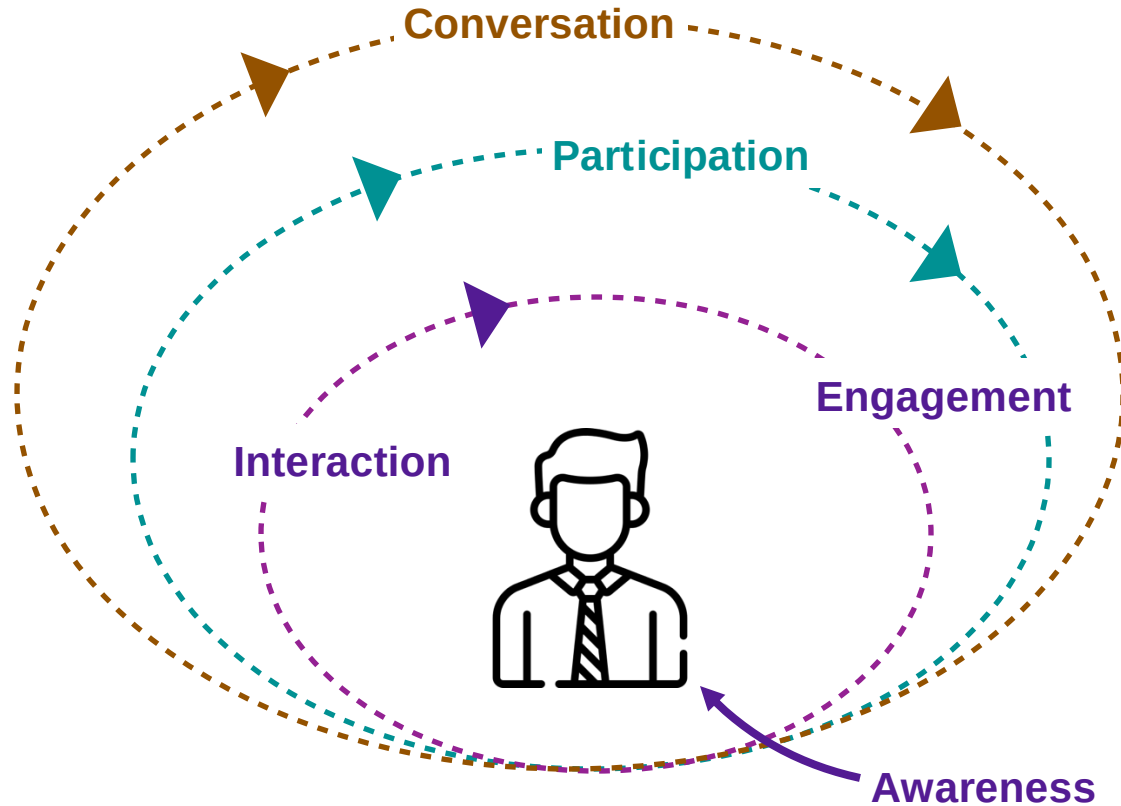
Awareness



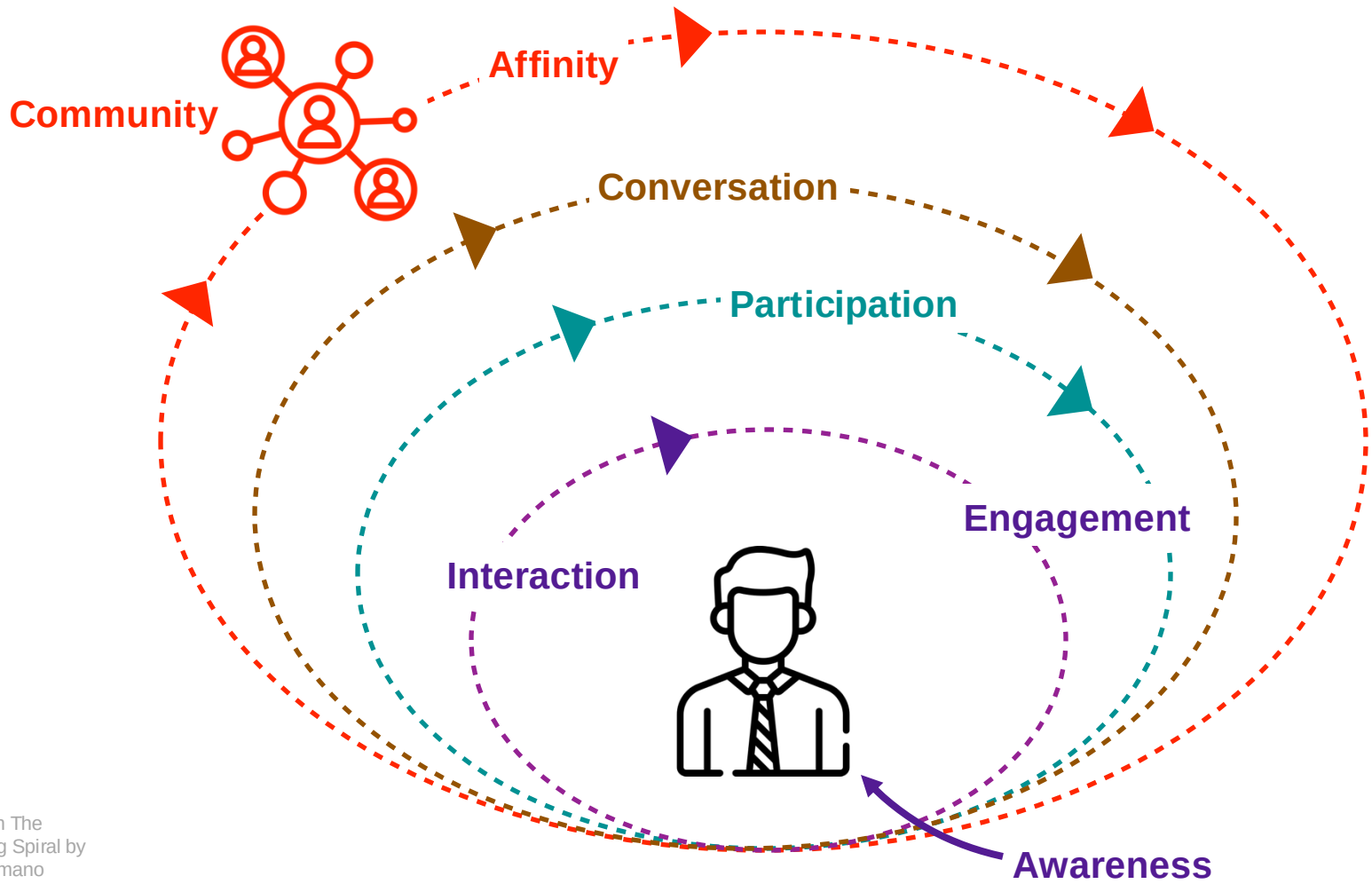
Based on The
Marketing Spiral by
David Armano



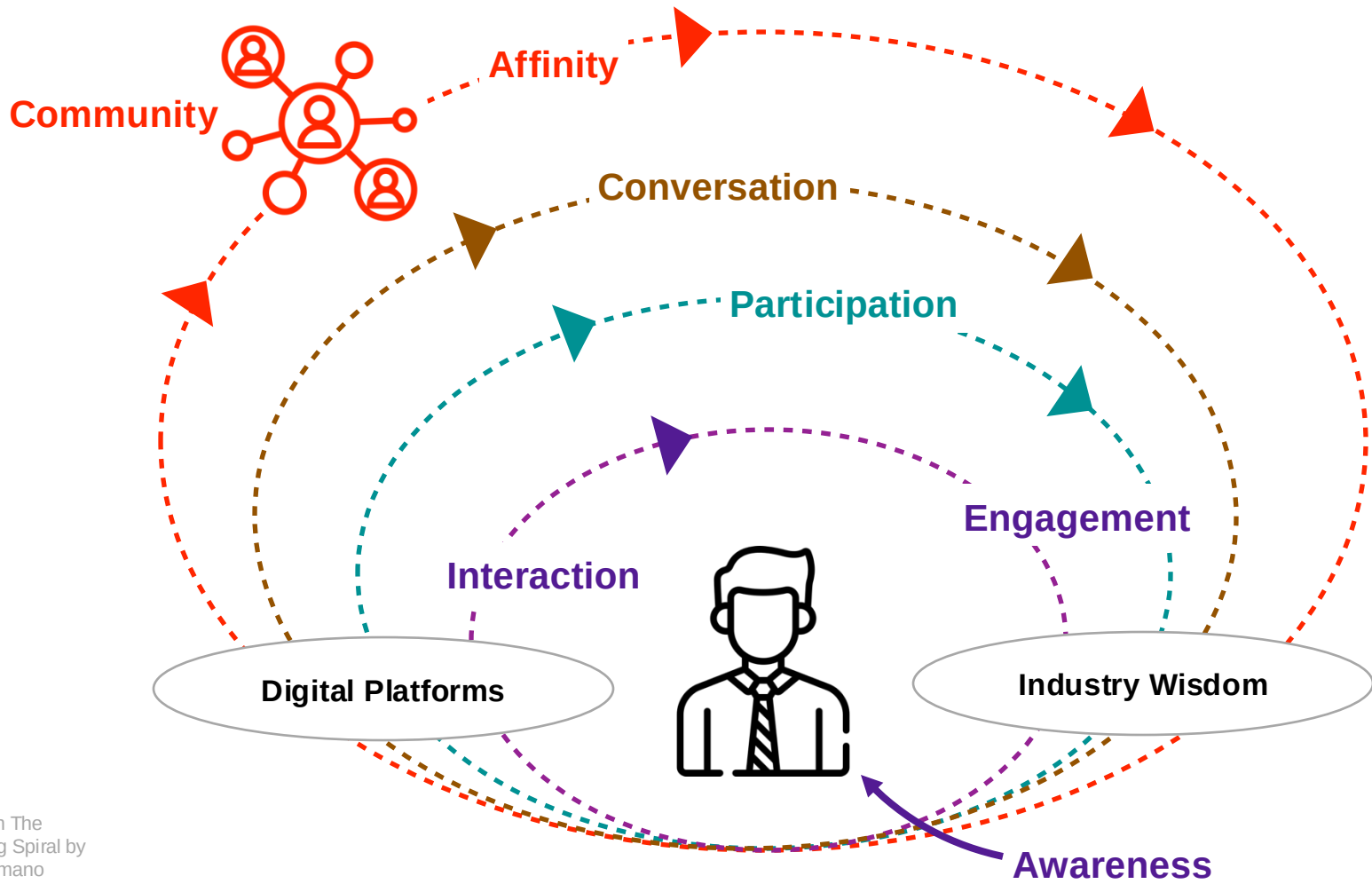
Based on The
Marketing Spiral by
David Armano

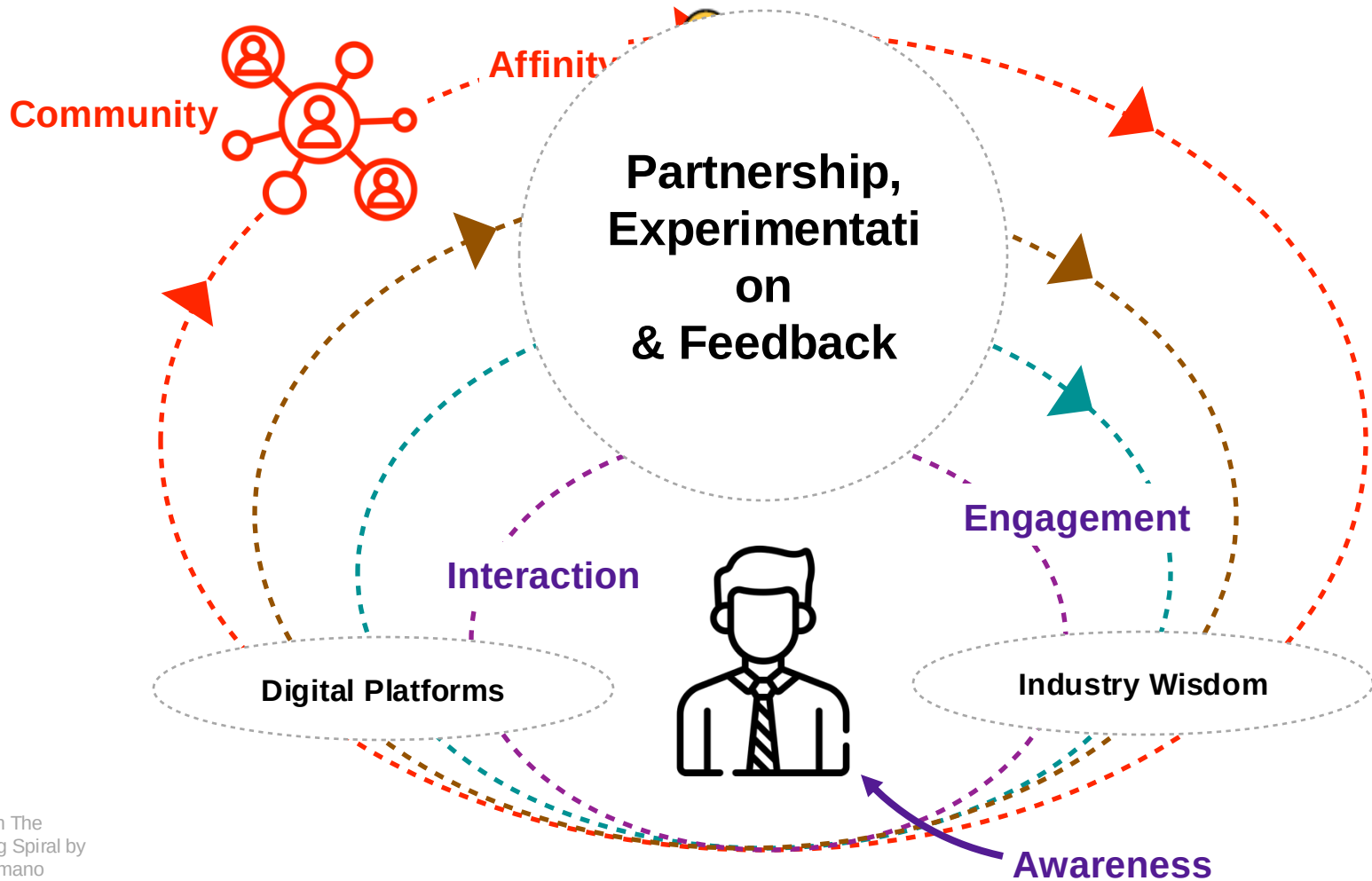


Based on The
Marketing Spiral by
David Armano



Based on The
Marketing Spiral by
David Armano



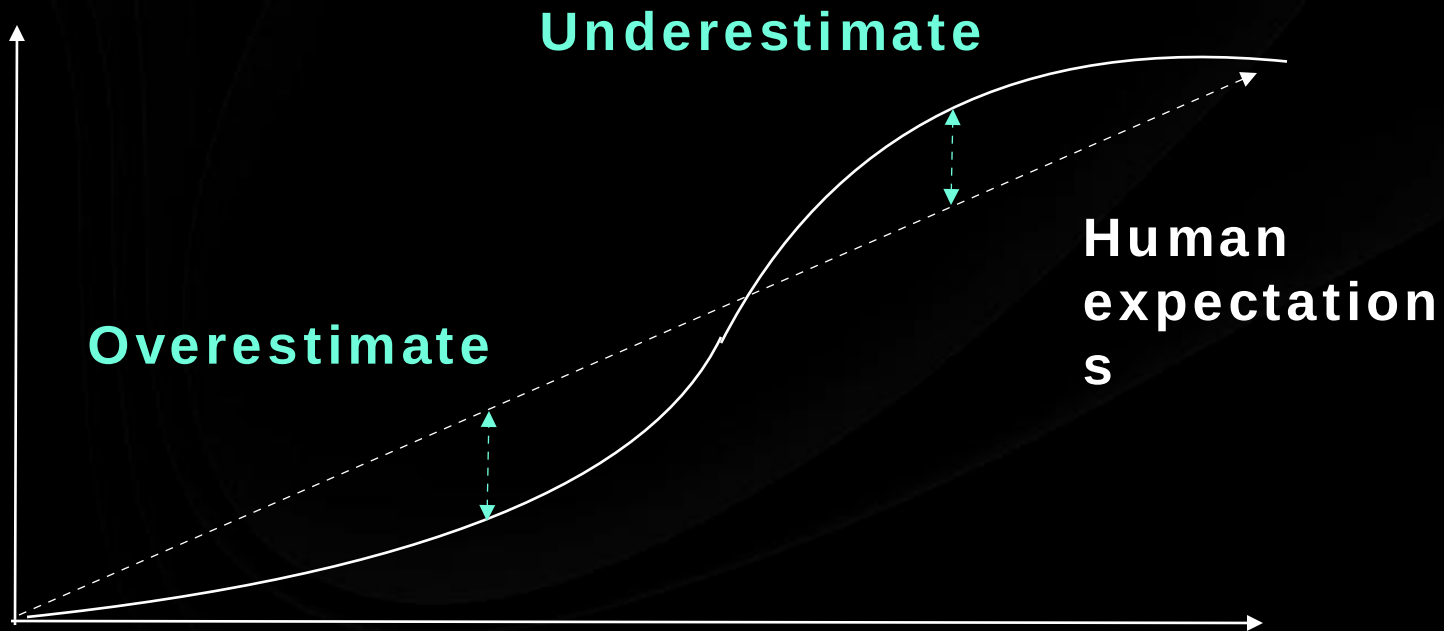


**What if... we focus on
trust, connection and
experimentation?**

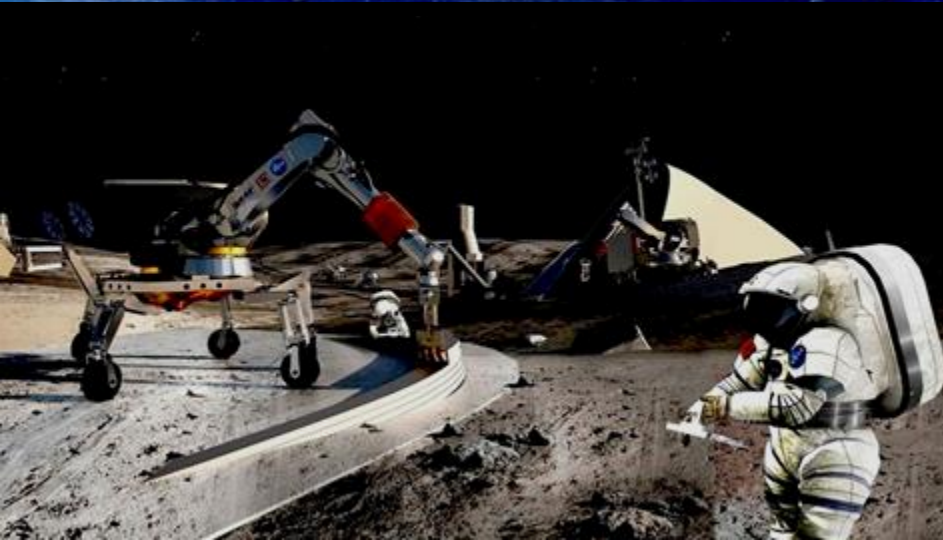
Exploring Futures



**NIKOLAS
BADMINTON**











**Futures work starts in
the present day by
questioning everything***

* and there's zero risk in doing so

1

**Question your
own history &
perspectives.**

2

**Look for pockets
of the future in
the present.**

3

**Be wildly
creative &
collaborate.**

4

**Shift your mindset
from what is to
what if.**

imagination
anticipation
empathy

Think like a futurist



1. Pick a signal, or two
2. Think about trends
3. Share your ideas



3-day Futures
Challenge

Facing Our Futures



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