

**Thank you for joining us
remotely.**

**We'll begin shortly— stay
connected.**

The demographic turn. Actions needed for research, innovation, and policy in Europe?

AGENDA

- Warm-up
- Background data
- Overview of the foresight process
- Scenarios 2050
- Challenges, opportunities, recommendations

AGENDA



Warm-up
Initial Engagement



Background data
Data streams & historical analysis



Overview of the foresight process
Scanning → Scenarios → Strategy



Scenarios 2050
Plausible futures visualization



Challenges, opportunities, recommendations
Risks, Growth, Actionable insights

WARM UP

- By 2040, do you expect to see more or less PhD holders?
- Do you expect more or less innovators in Europe?

BACKGROUND DATA

Europe's Demographic Shift & The R&I Funding Squeeze

THE DEMOGRAPHIC TRIGGER (Mid-Century Projection)



The proportion of **Europeans aged 85 and over** is projected to more than **double**, reaching approximately:

10% of the total population

THE BUDGET REORIENTATION

Public Research & Innovation (R&I) budgets will inevitably **shift** towards **age-related solutions**:



Age-Tech



Gerontology



Healthcare



THE FISCAL IMPACT

Immense **fiscal pressure** placed on **non-age-related** research funding.



Europe's Demographic Crisis: The Shrinking Youth & Future Workforce

THE BROAD TREND: WORKING-AGE DECLINE



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Overall working-age population is steadily decreasing across the EU.

THE CRITICAL CHALLENGE: DROP IN YOUNG COHORTS



THE CRITICAL CHALLENGE: **DROP IN YOUNG COHORTS**

The most significant issue is the sharp drop in younger generations.

KEY DATA: PRIMARY TERTIARY STUDENT AGE GROUP (21–26 YEARS)



-2.5 MILLION

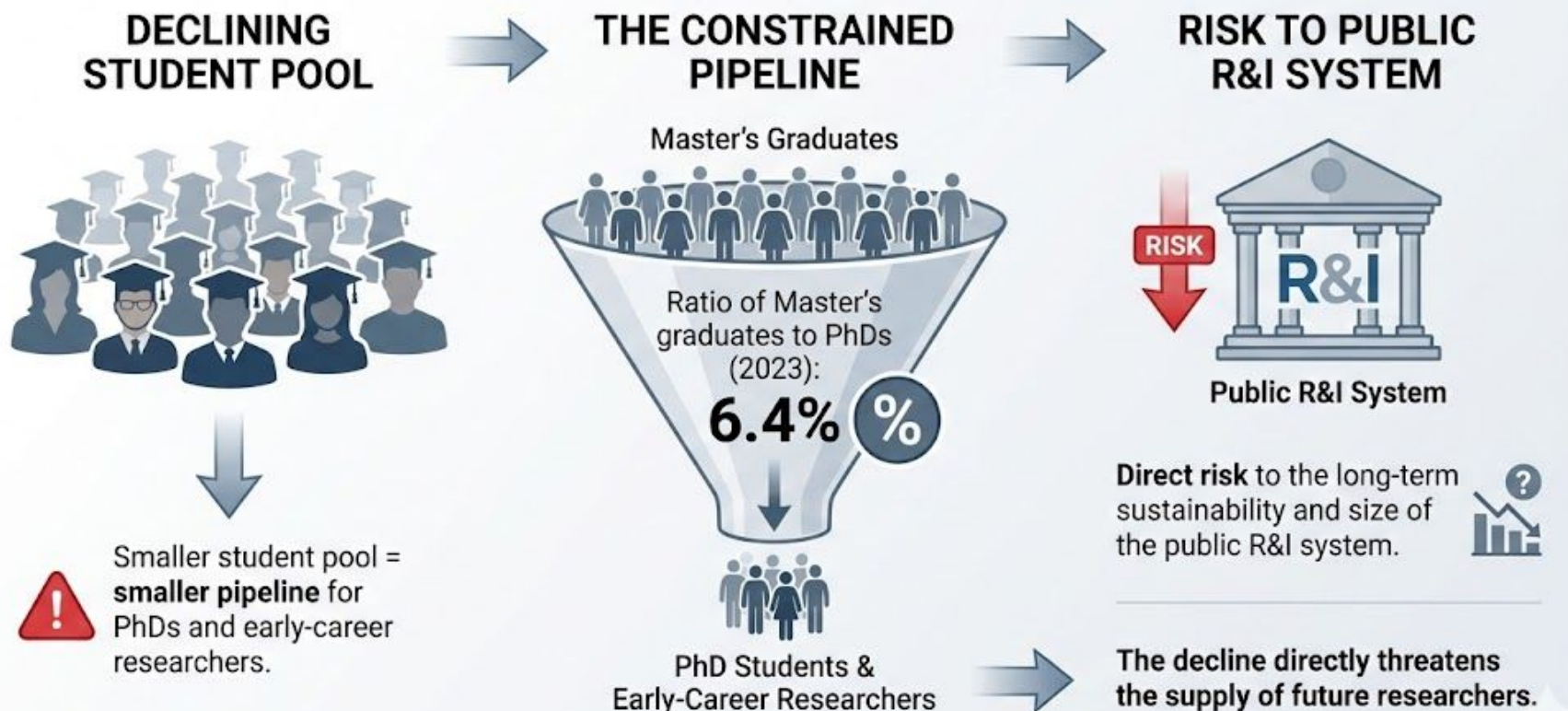
NEARLY 2.5 MILLION FEWER PERSONS PROJECTED BY 2050 (EU-27)

(This is the primary age group for tertiary students)



Implication: Shrinking talent pool for higher education and future workforce.

The Shrinking Researcher Pipeline & Future R&I Risk



Labour Force Decline & The Productivity Imperative

THE CHALLENGE: DECLINING WORKFORCE



Labour force set to decline by 12%
(approx. 25 million people).

THE SOLUTION: LABOUR PRODUCTIVITY



Must become the **unique driver of economic growth** (projected 1.4% annual growth).



R&I INVESTMENT
(Crucial for Productivity)

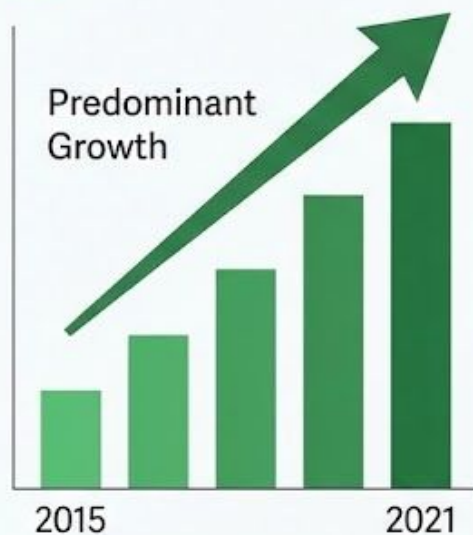
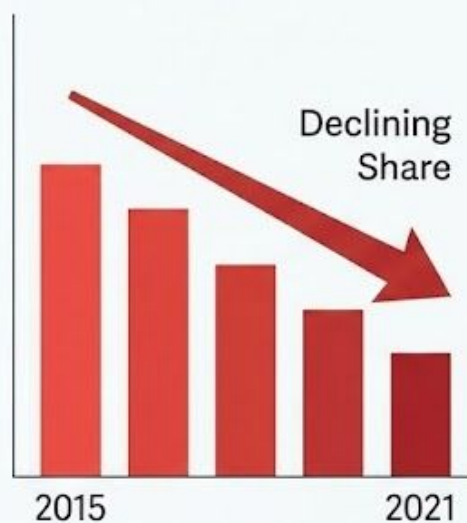
Competes directly with

RISING COSTS
(Pensions & Healthcare)

TOTAL RESEARCHERS

2015: 2.4M → 2021: 3.0M

Shift in Researcher Growth (2015-2021): The Rise of the Business Sector

**BUSINESS SECTOR****HIGHER EDUCATION****GOVERNMENT**

Generative AI: Workforce Solution & Future Questions

POTENTIAL BENEFITS OF GENERATIVE AI



Fills future workforce shortages.



Frees up researchers from administrative tasks.

KEY QUESTIONS FOR THE FUTURE

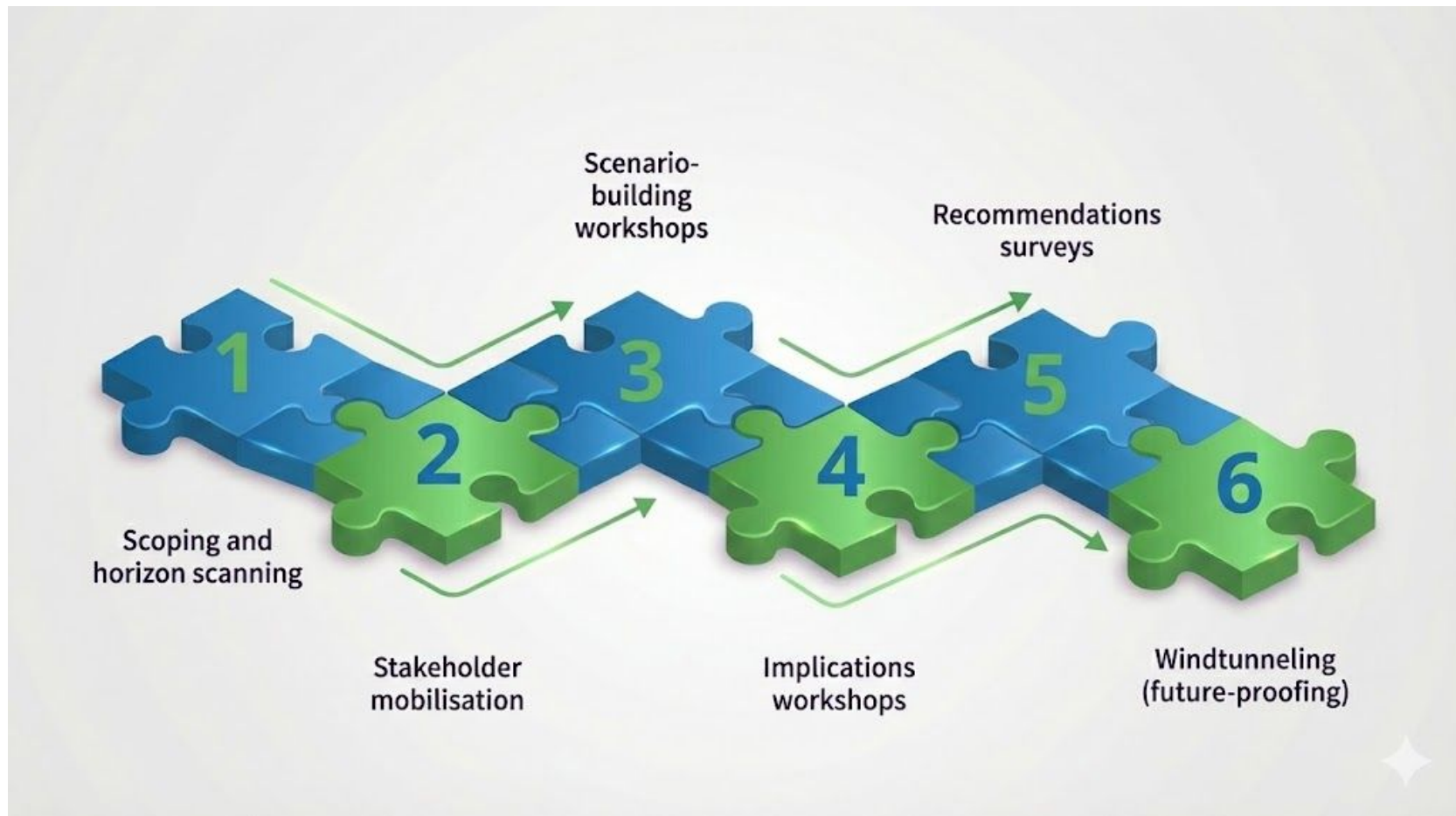


1. What is the new role of the human researcher?

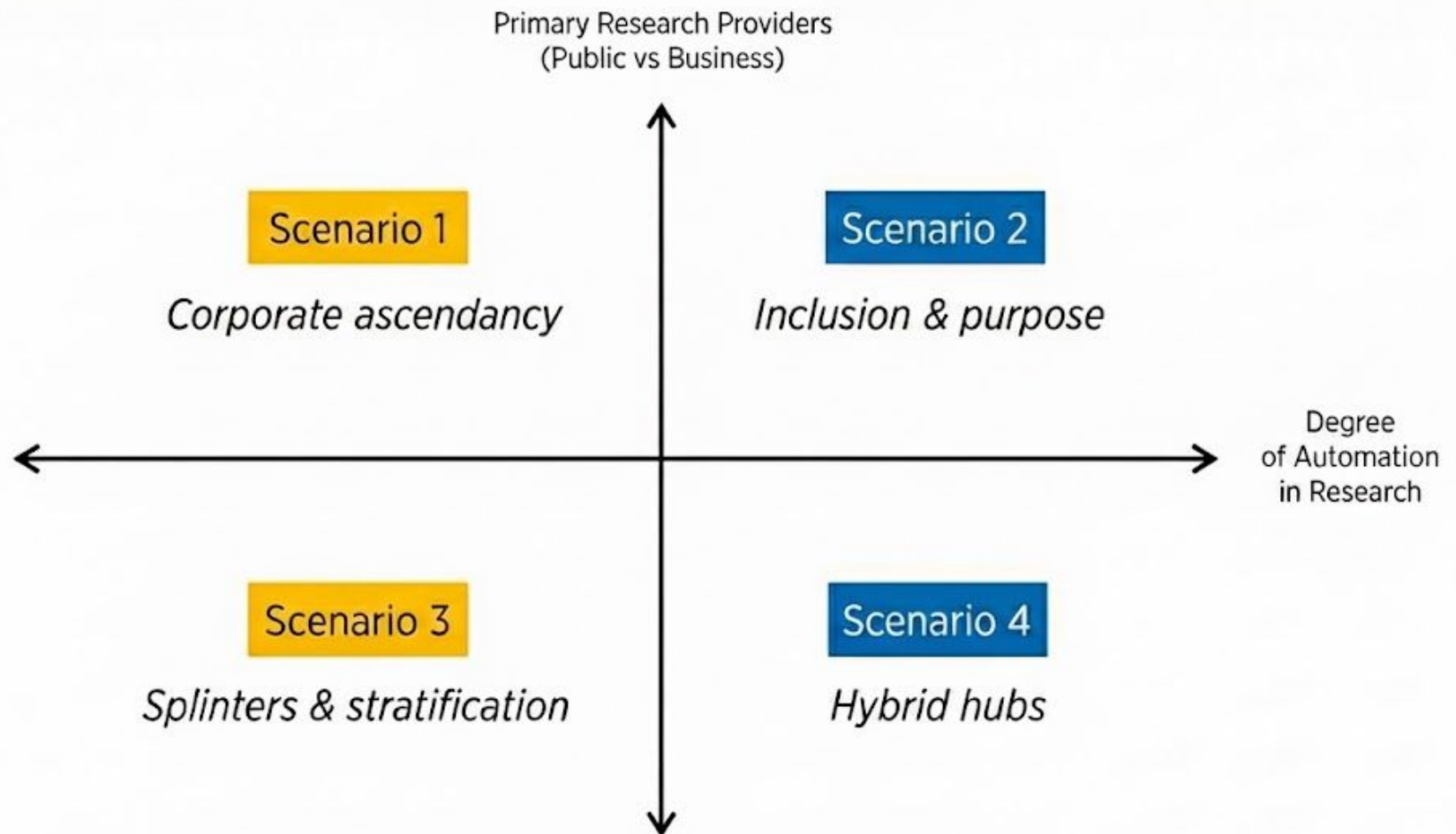


2. Can technology alone overcome the demographic deficit?

OVERVIEW OF THE FORESIGHT PROCESS

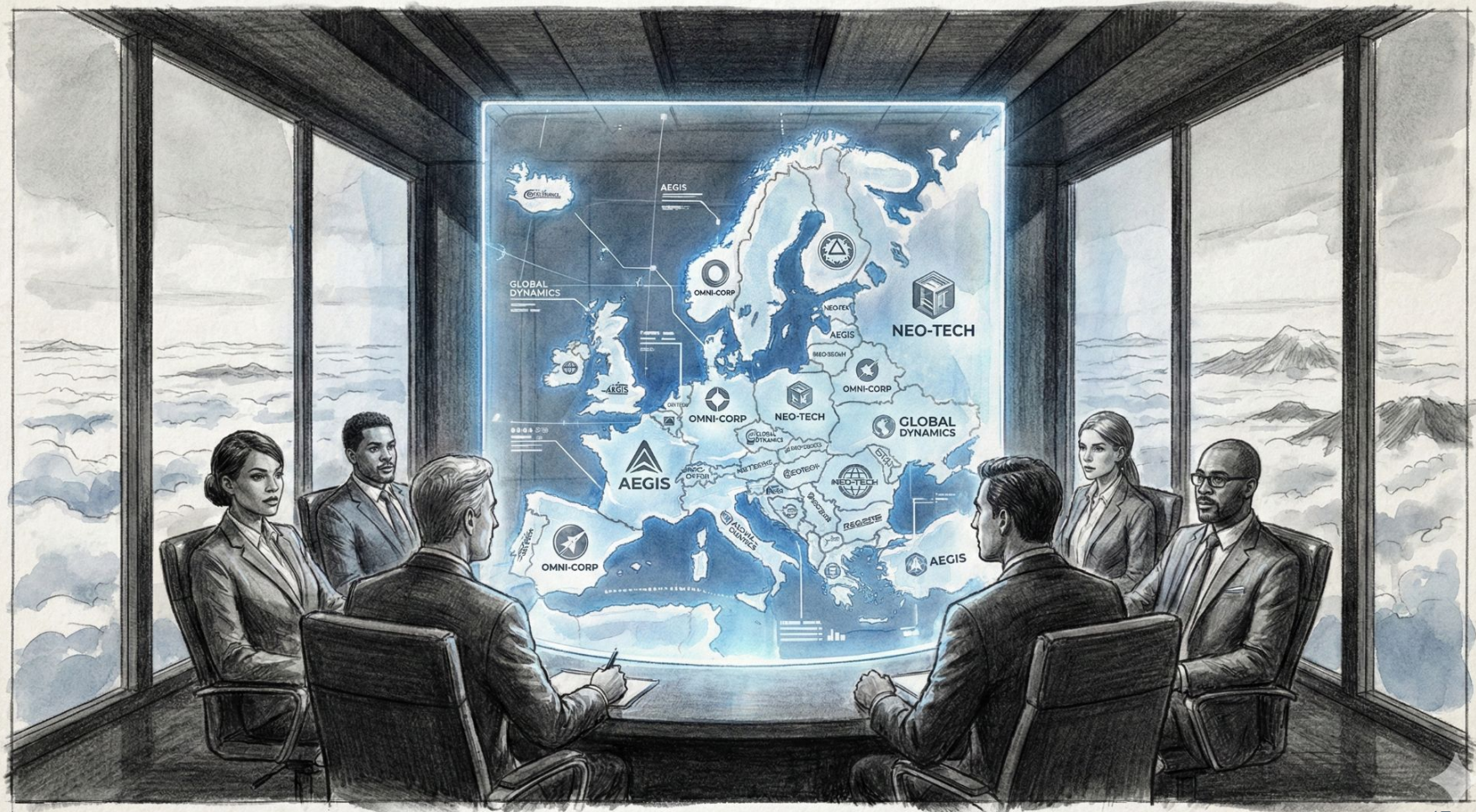


SCENARIO AXES



SCENARIO 1:

CORPORATE ASCENDANCY



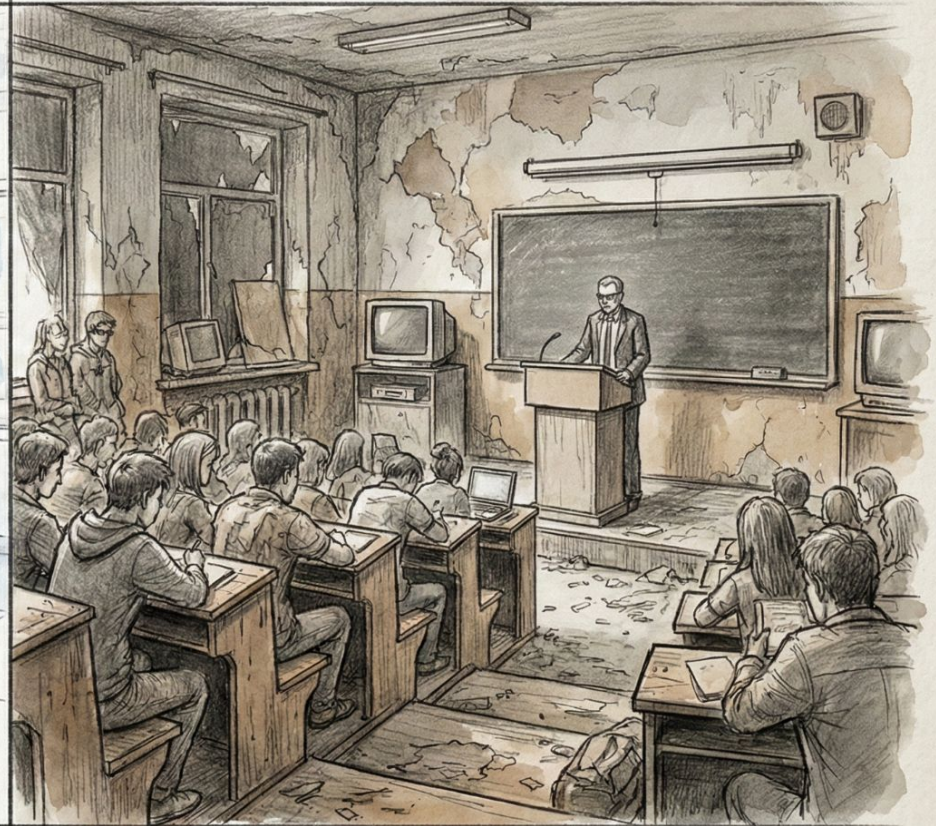


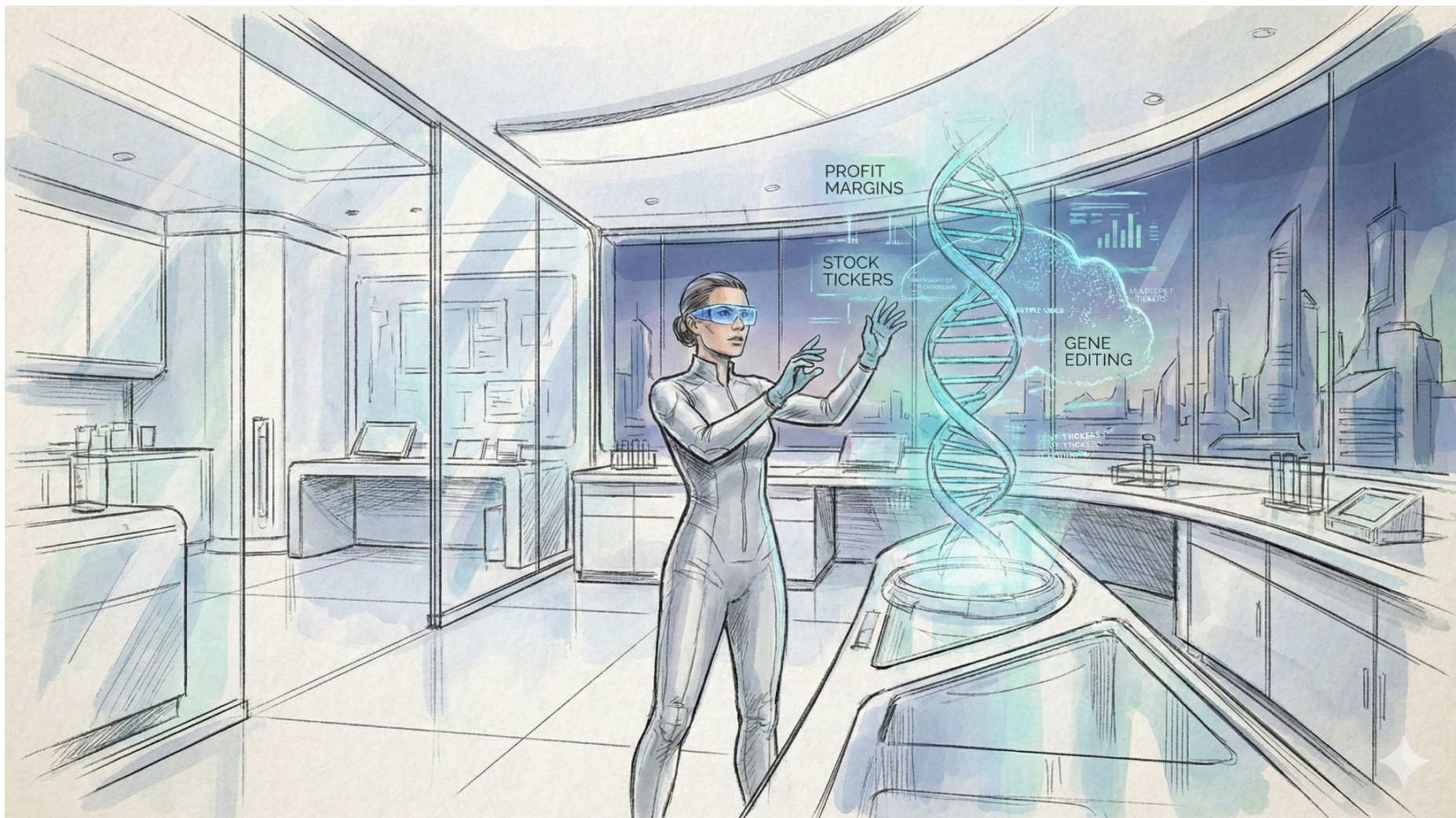


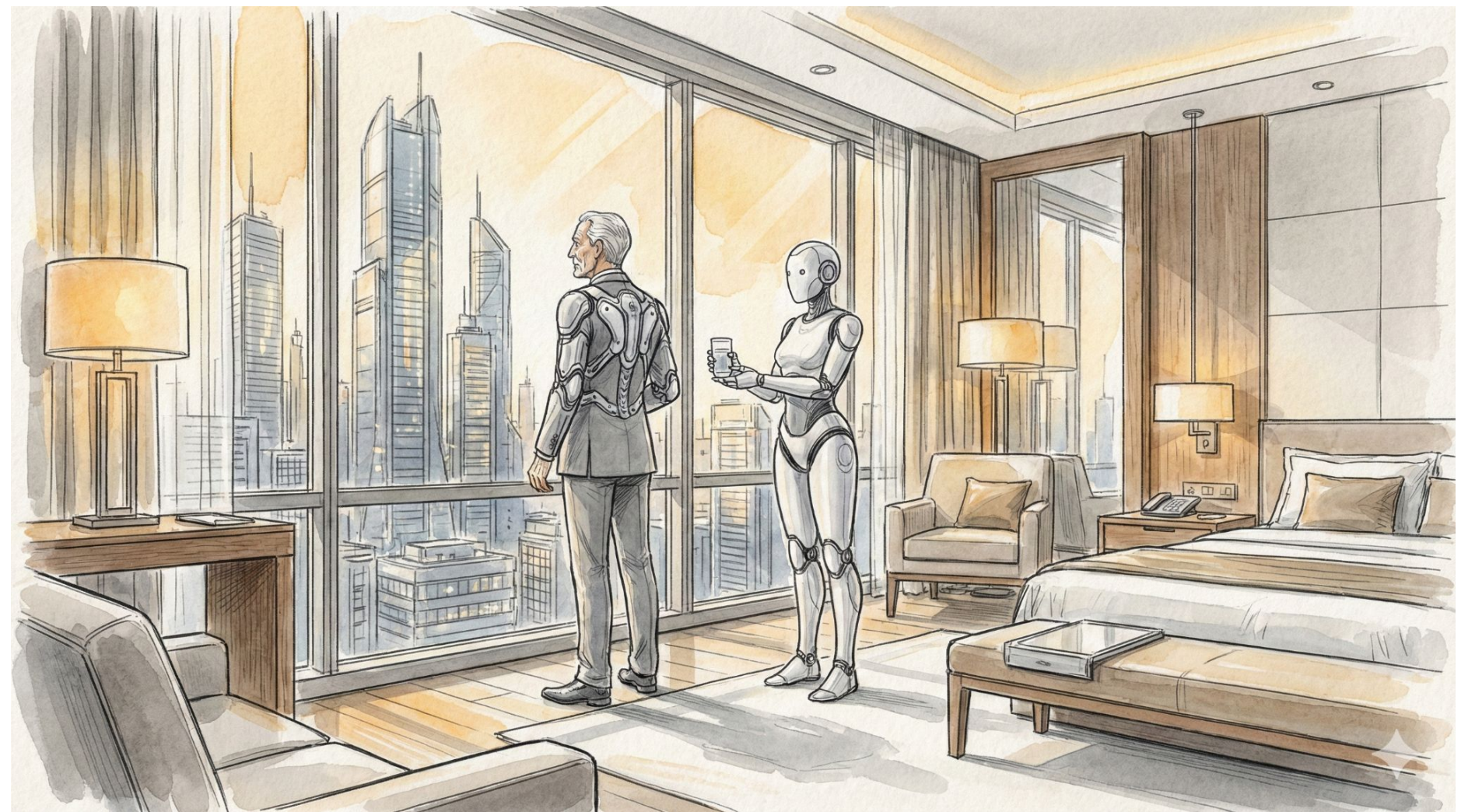
CORPORATE ACADEMY



PUBLIC UNIVERSITY



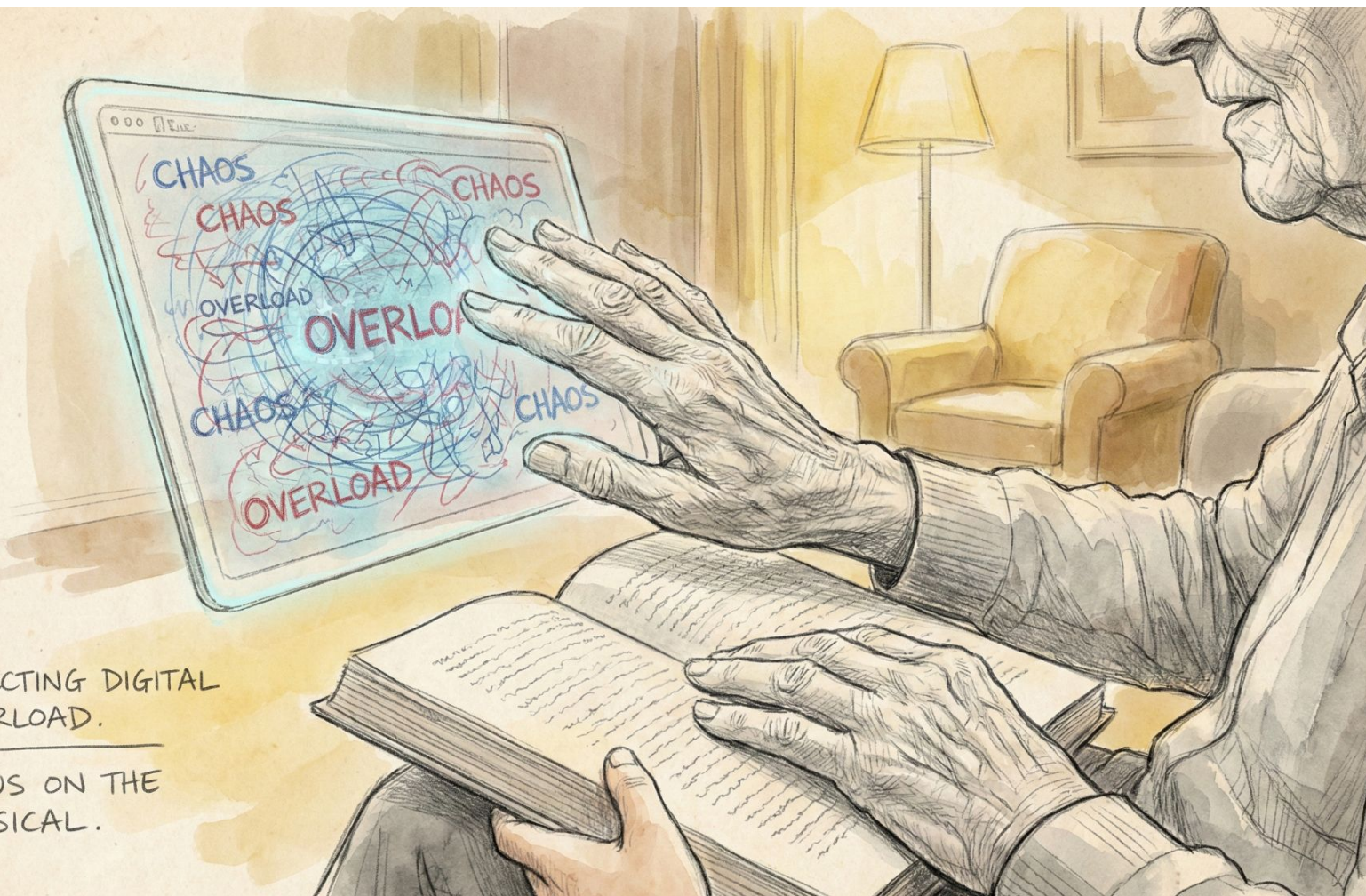




SCENARIO 2:

INCLUSION & PURPOSE





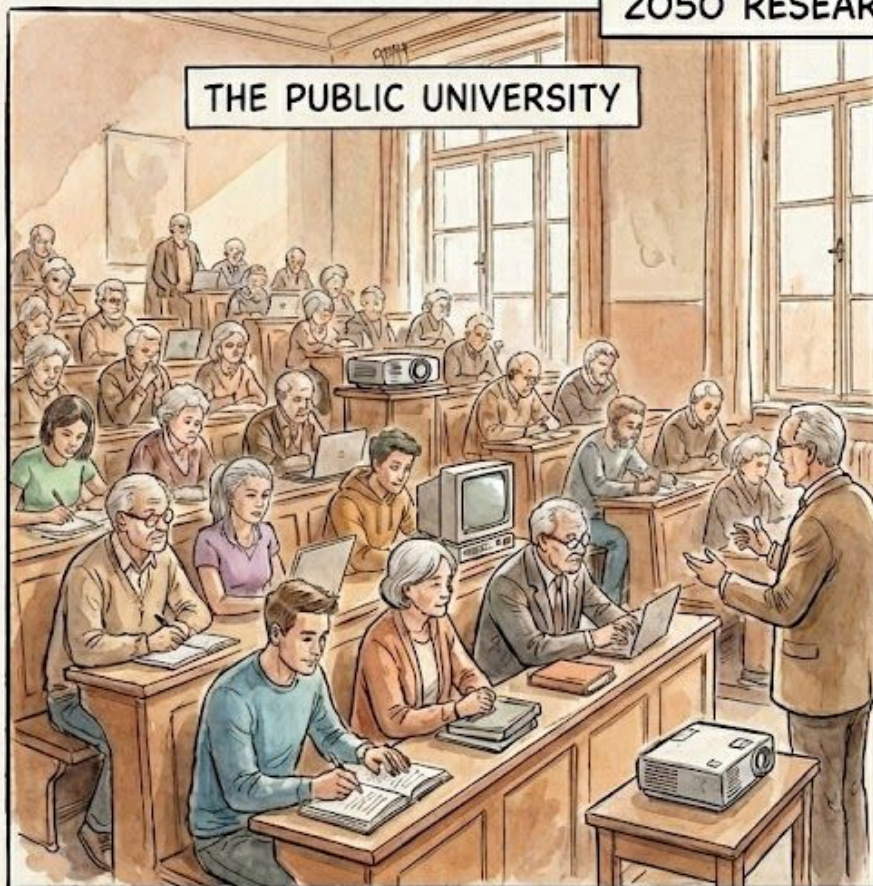
REJECTING DIGITAL
OVERLOAD.

FOCUS ON THE
PHYSICAL.



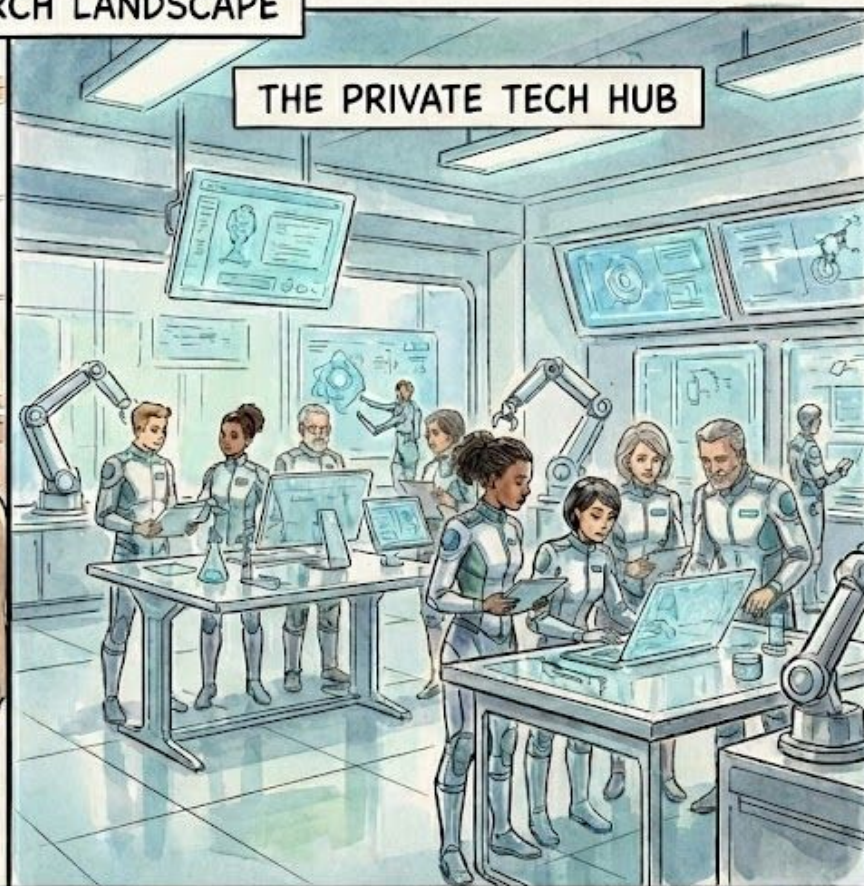
2050 RESEARCH LANDSCAPE

THE PUBLIC UNIVERSITY



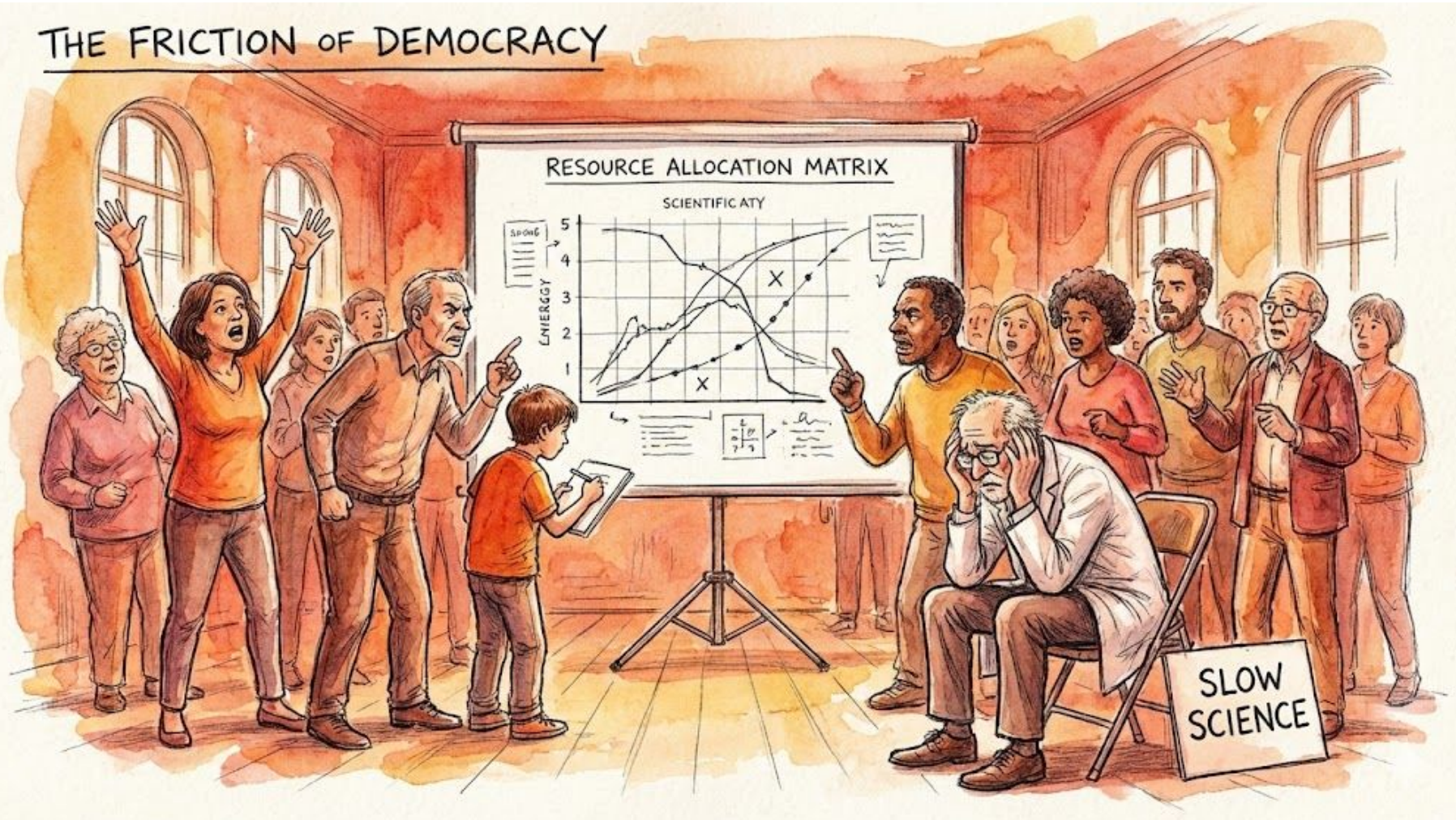
THE PUBLIC UNIVERSITY

THE PRIVATE TECH HUB



THE PRIVATE TECH HUB

THE FRICTION OF DEMOCRACY



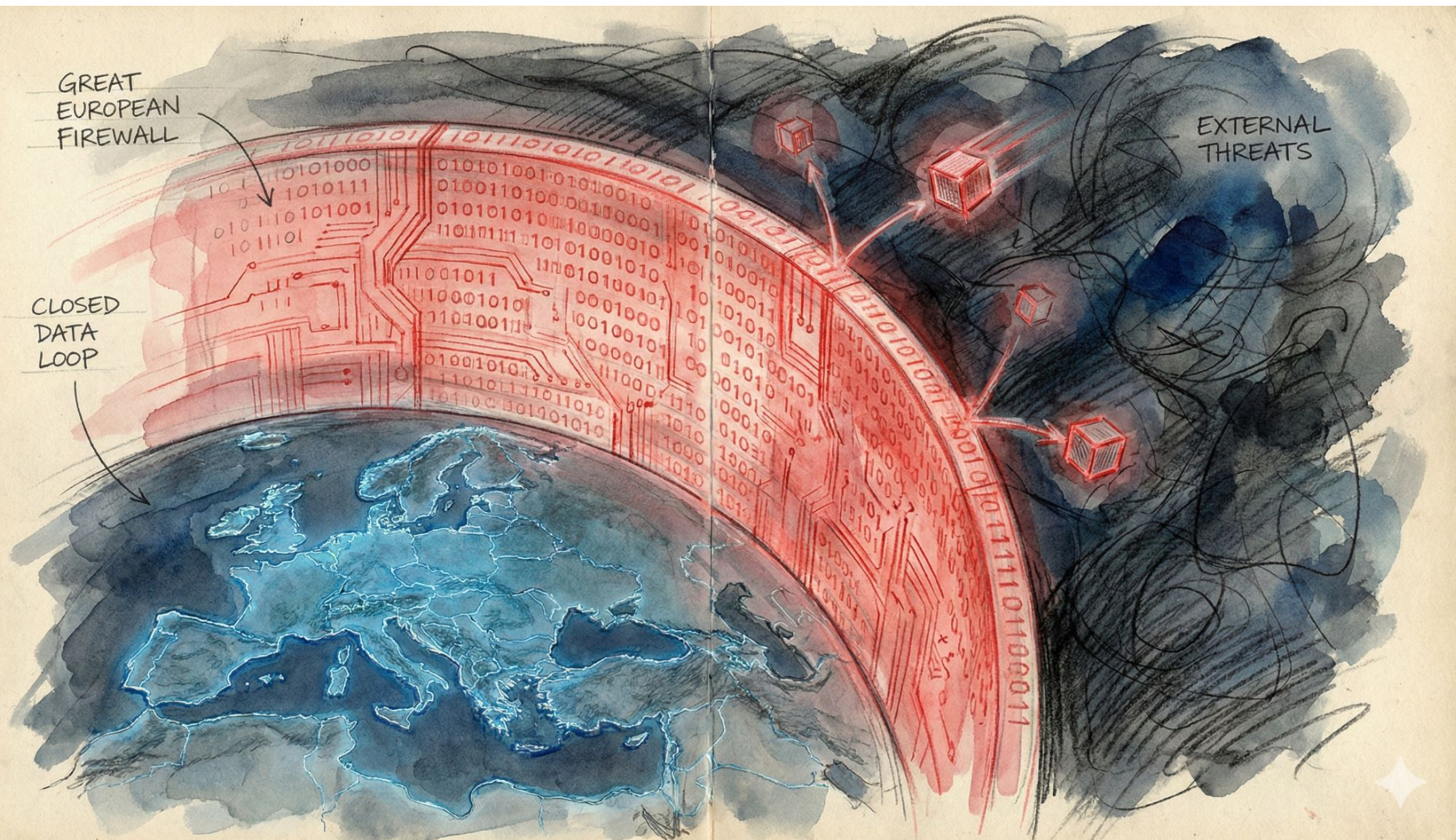
SCENARIO 3:

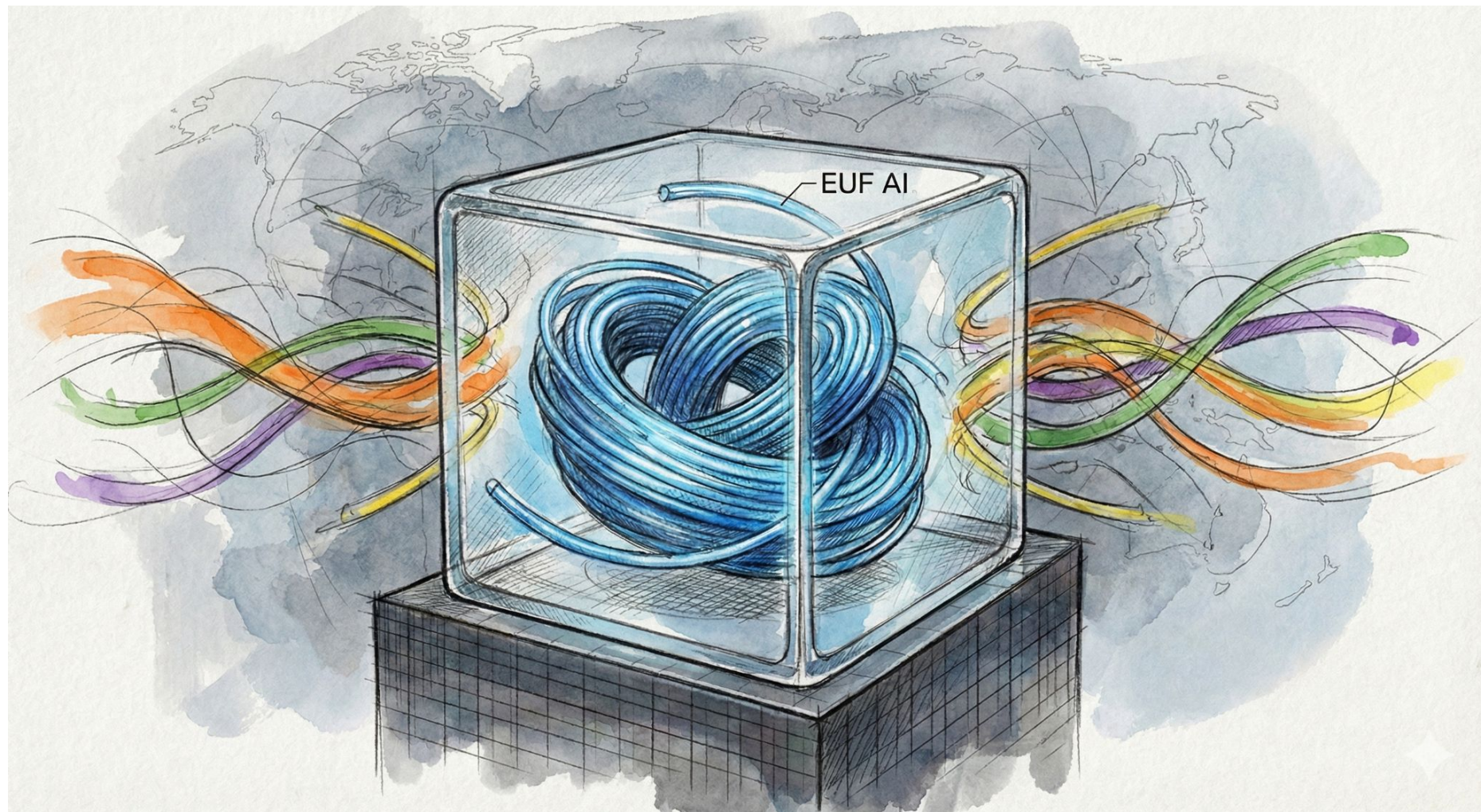
**SPLINTERS &
STRATIFICATION**

GREAT
EUROPEAN
FIREWALL

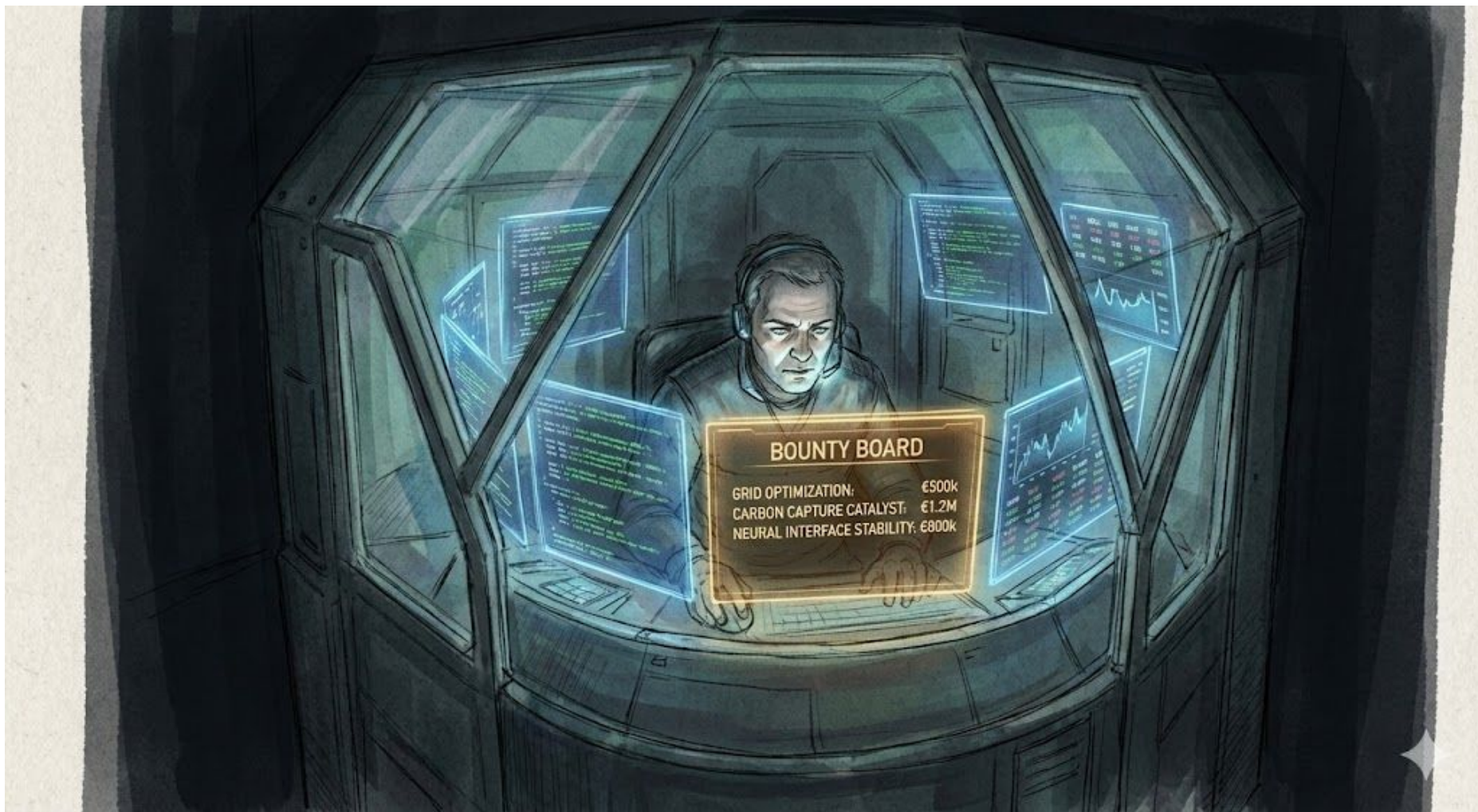
CLOSED
DATA
LOOP

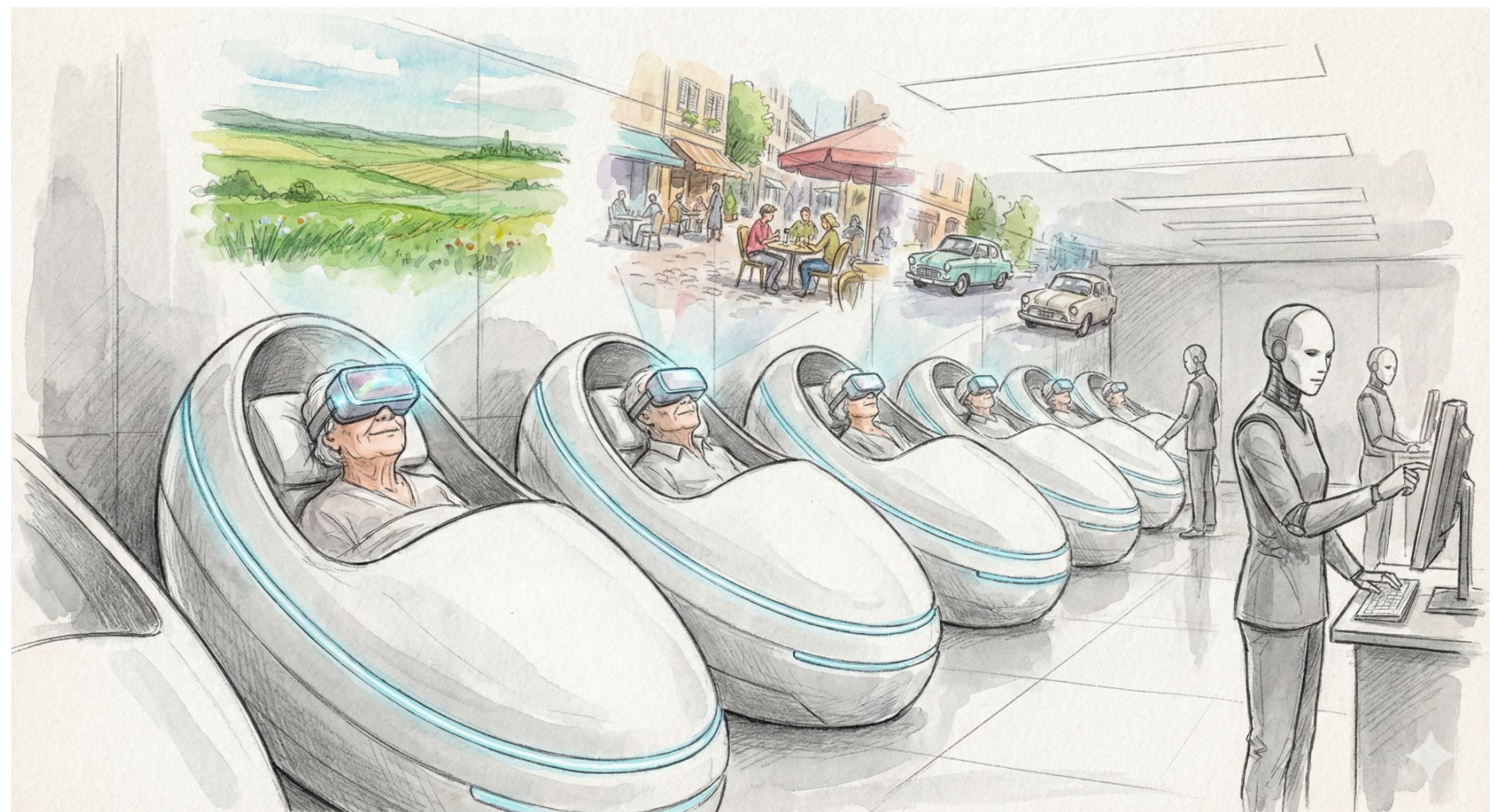
EXTERNAL
THREATS







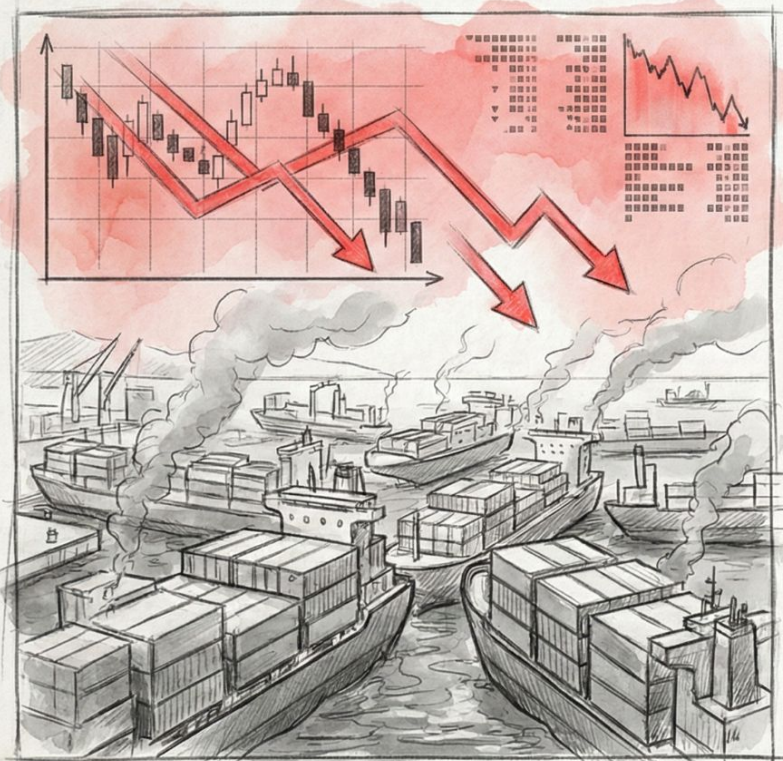




SCENARIO 4:

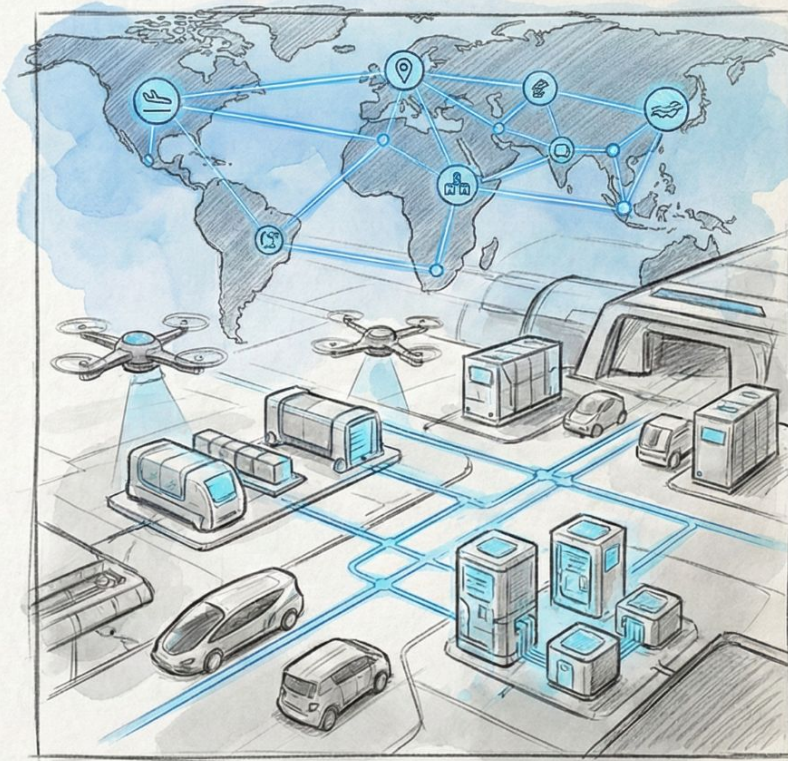
HYBRID HUBS

GLOBAL TRADE CHAOS



GLOBAL TRADE CHAOS

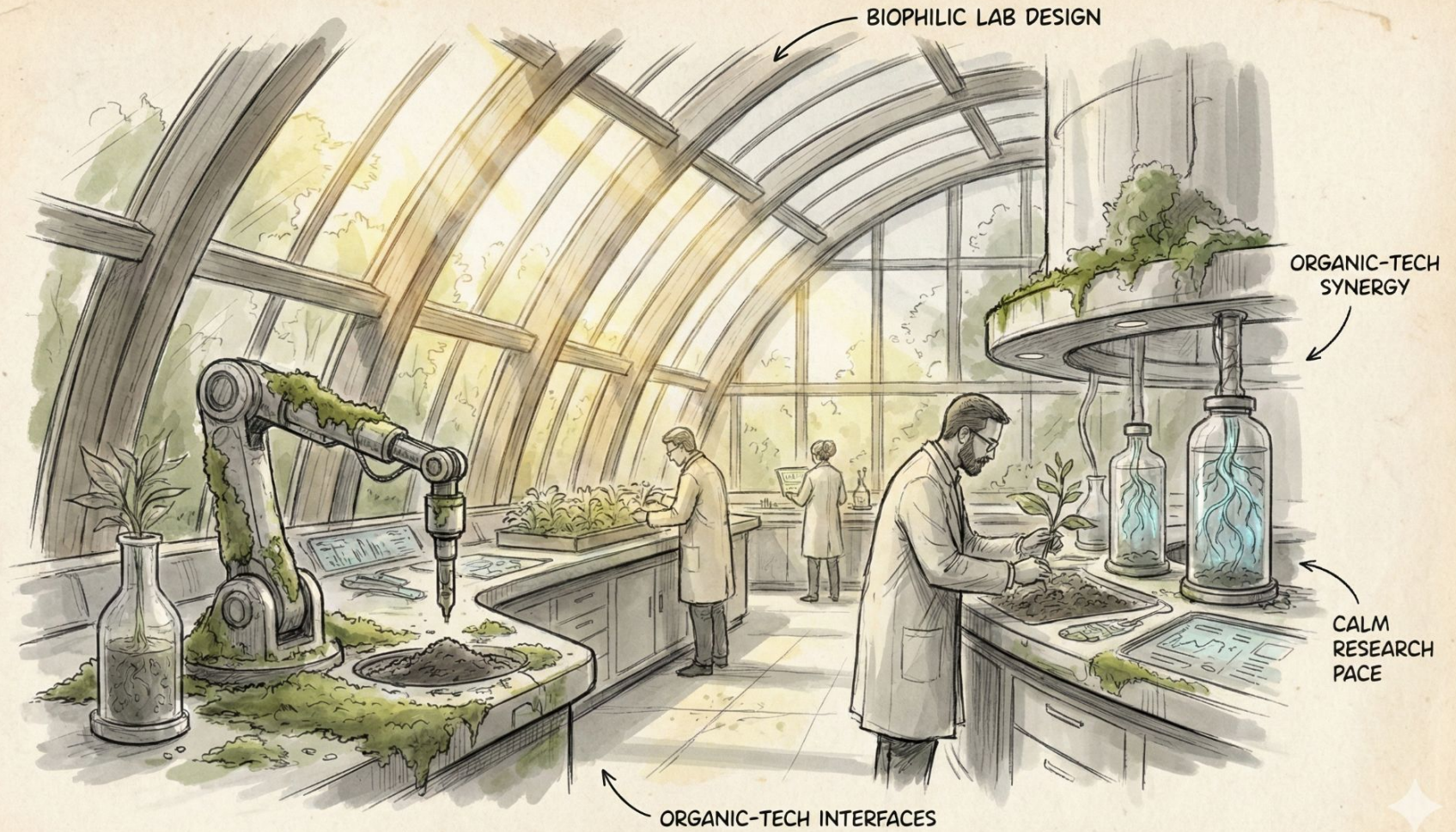
THE HYBRID HUB: RESILIENCE

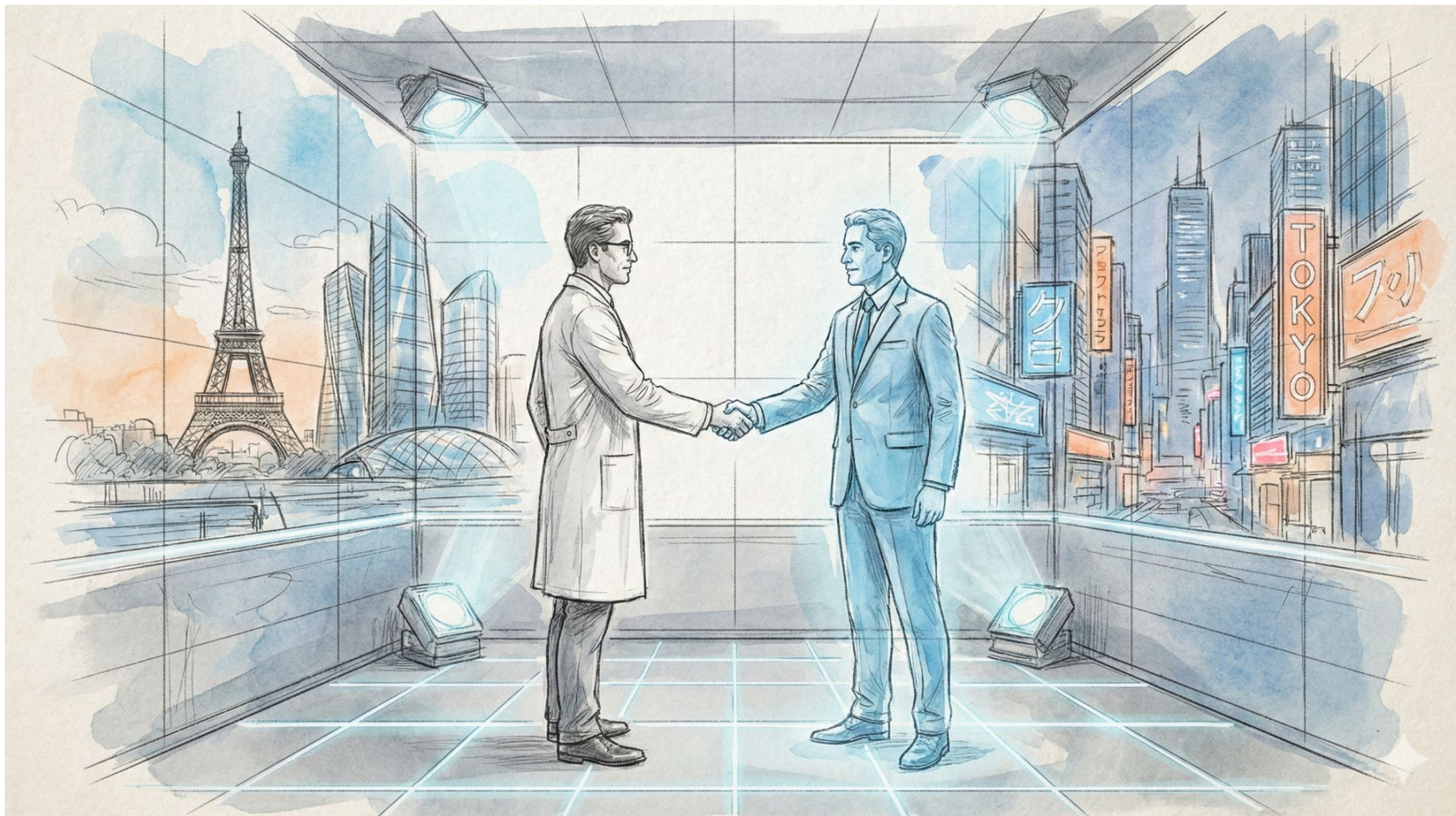


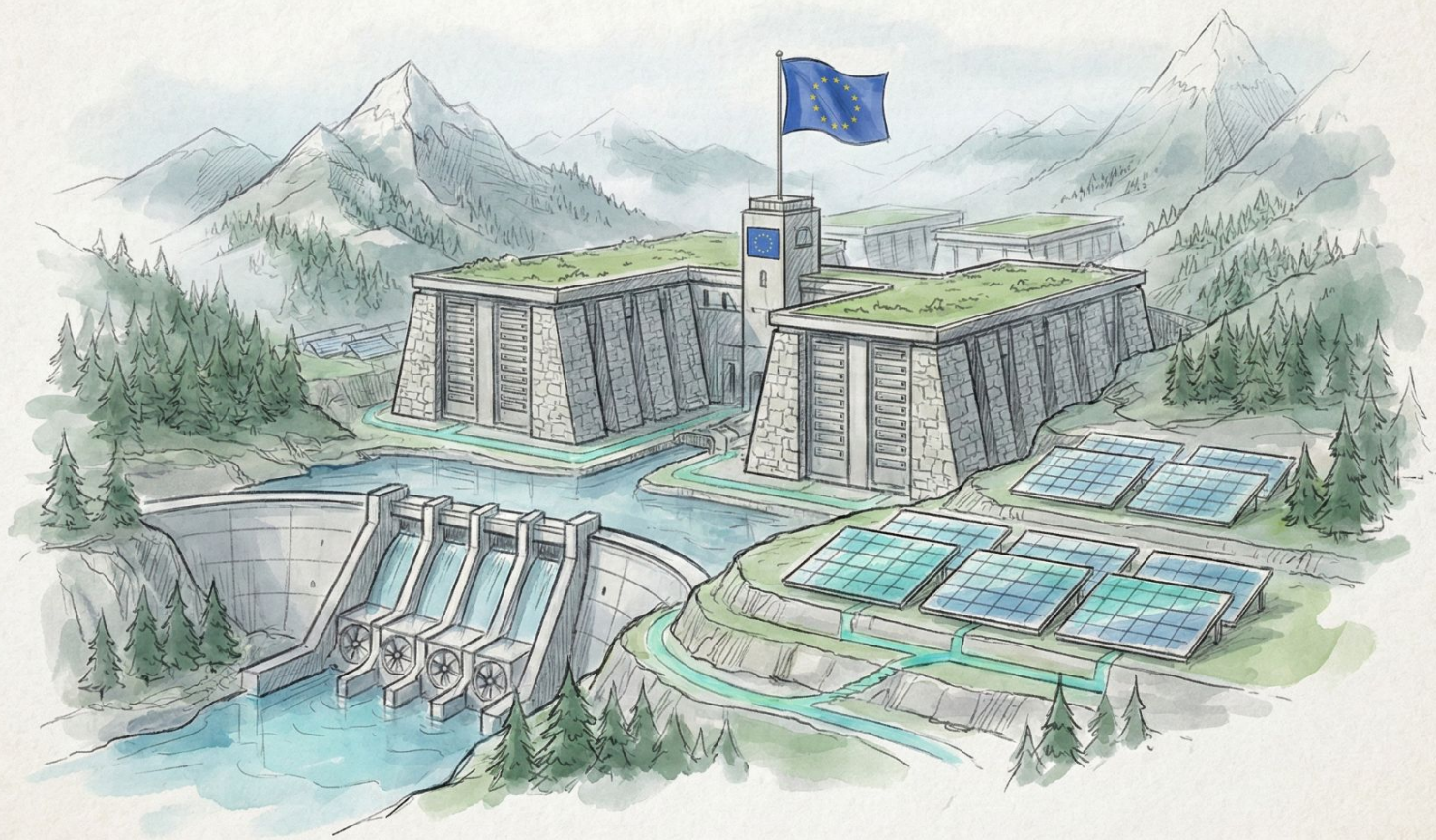
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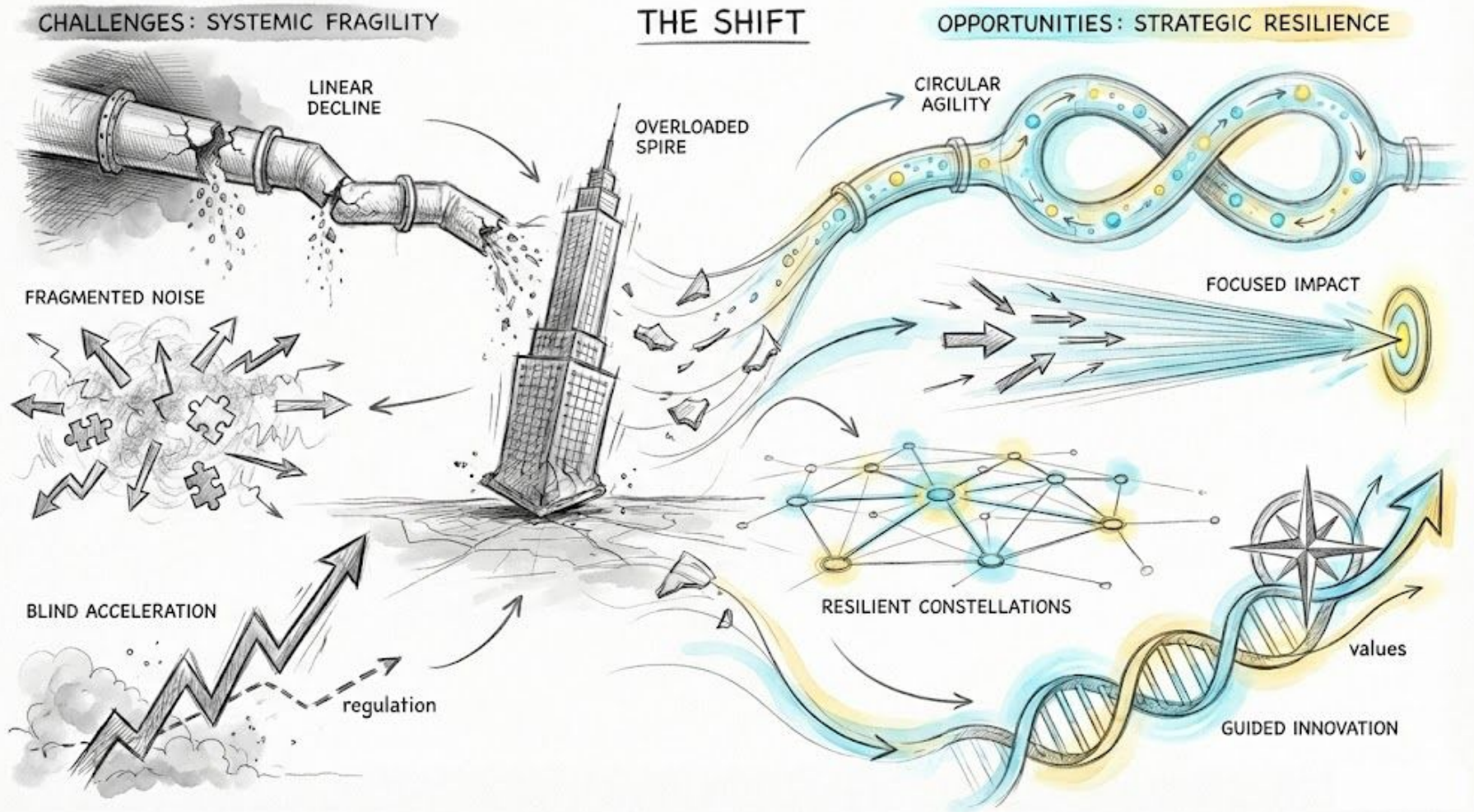




EUROPEAN CLOUD

CHALLENGES, OPPORTUNITIES & RECOMMENDATIONS

CHALLENGES & OPPORTUNITIES



DIMENSION 1: Demographics & Education

CHALLENGES:



The Talent Crisis

- Decline of Public Universities
- Narrowing Talent Pipeline

OPPORTUNITIES:



Systemic Resilience

- Systematise Lifelong Learning
- Guardians of Public Interest

DIMENSION 2: R&I Funding Architecture

CHALLENGES:



Instability & Fragmentation

- Neglect of Basic Research
- Strategic Fragmentation

OPPORTUNITIES:



Focused Efficiency

- Mission-Oriented System
- Strategic Division of Labour

DIMENSION 3: Socio-spatial Implications

CHALLENGES:



Concentration & Conflict

- Fragile Concentration
- Infrastructure Bottlenecks

OPPORTUNITIES:



Distributed Resilience

- Polycentric Networks
- Cohesion & Autonomy

DIMENSION 4: Interactions with Markets

CHALLENGES:



Market Logic & Regulatory Lag

- Dominance of Market Logic
- Regulatory Uncertainty

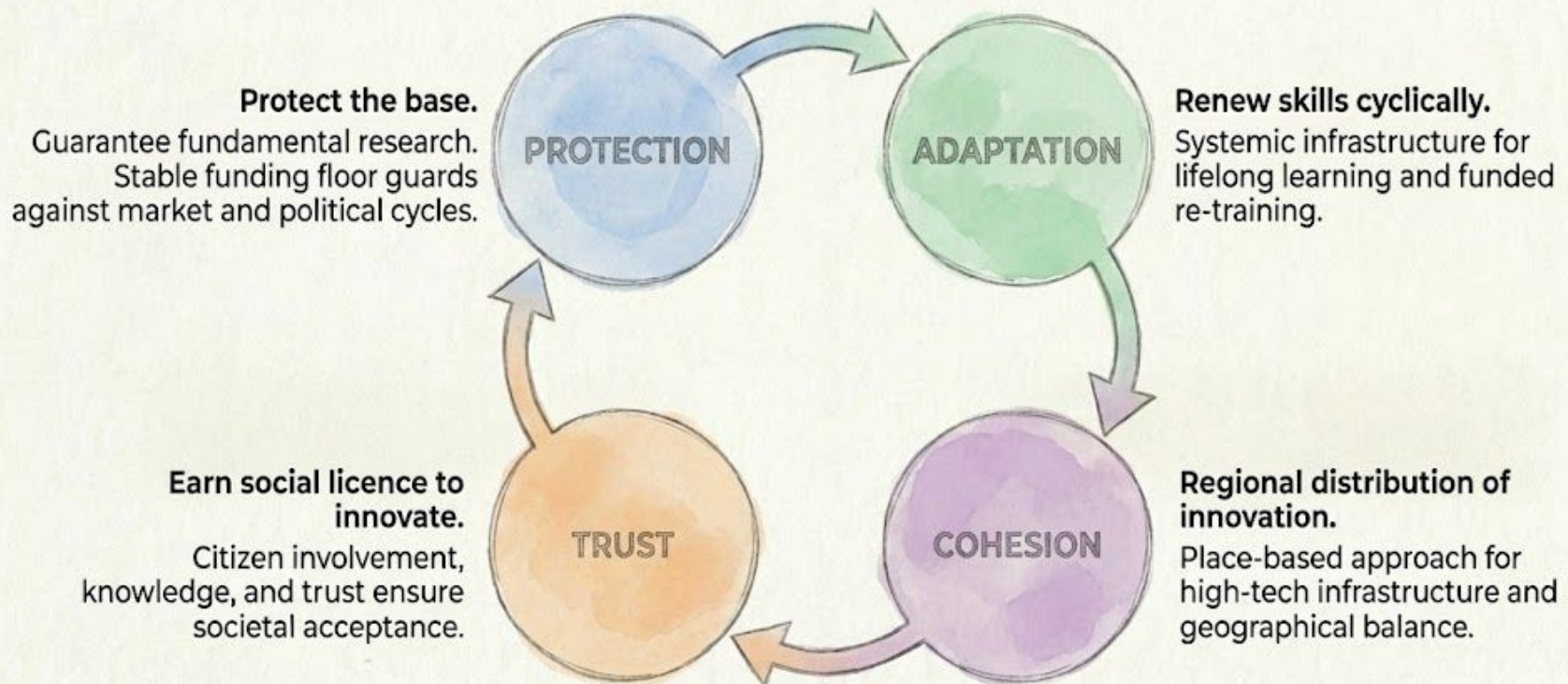
OPPORTUNITIES:



Strategic Leadership

- AI-Driven Market Leadership
- Purpose-Driven Advantage

STRATEGIC RECOMMENDATIONS FOR R&I



PANEL DISCUSSION

AND Q&A