The New Digital Divide:

When AI Consumes the Infrastructure Before People Do"

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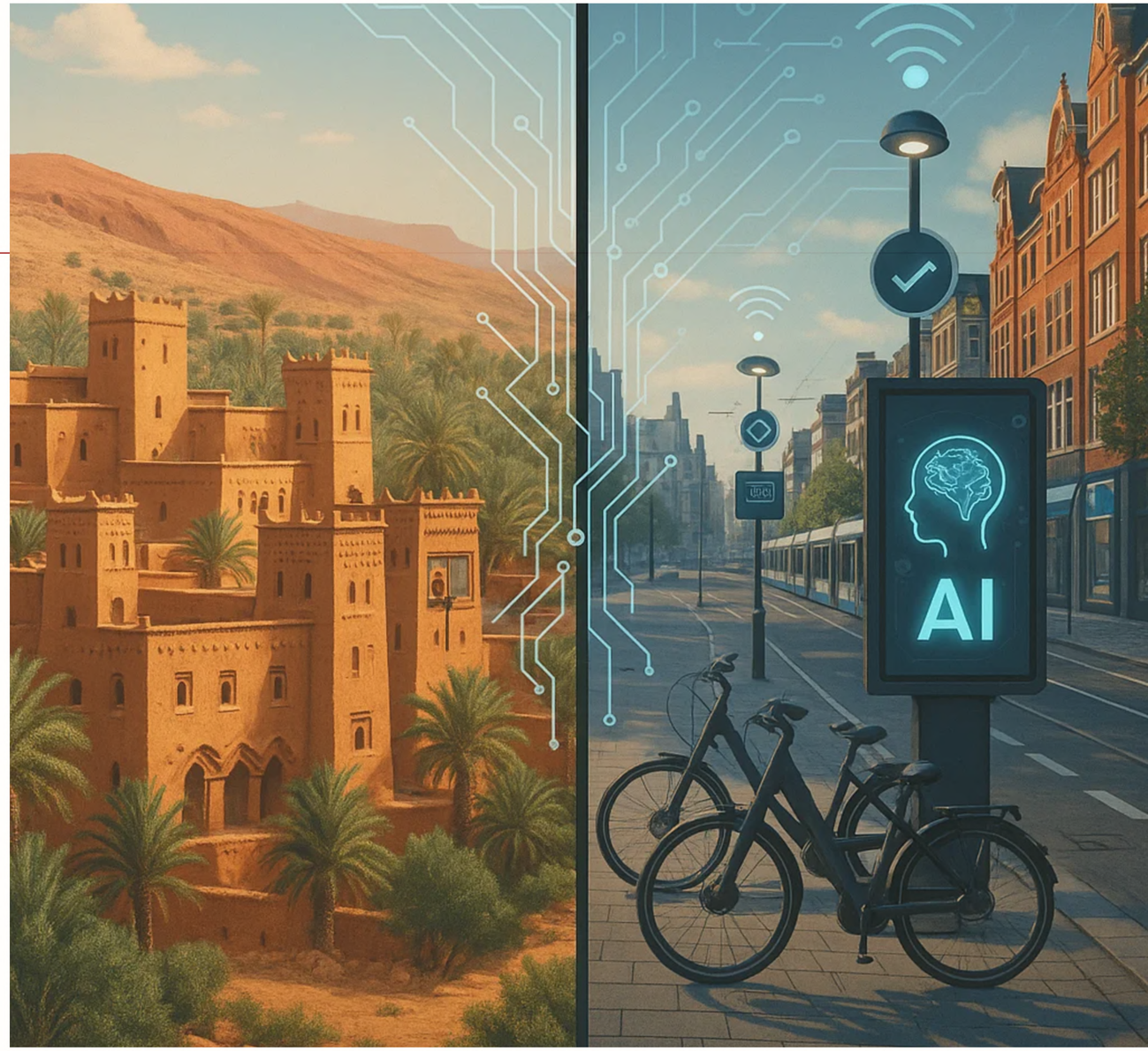
Introduction

"Imagine this: you're in a remote community—patchy signal, no stable broadband. You ask ChatGPT about the weather in Amsterdam. Boom. Instant response.

Not because you’re well connected,but because **ChatGPT** is.

We’re entering a world where **AI reaches the internet faster than people do.**

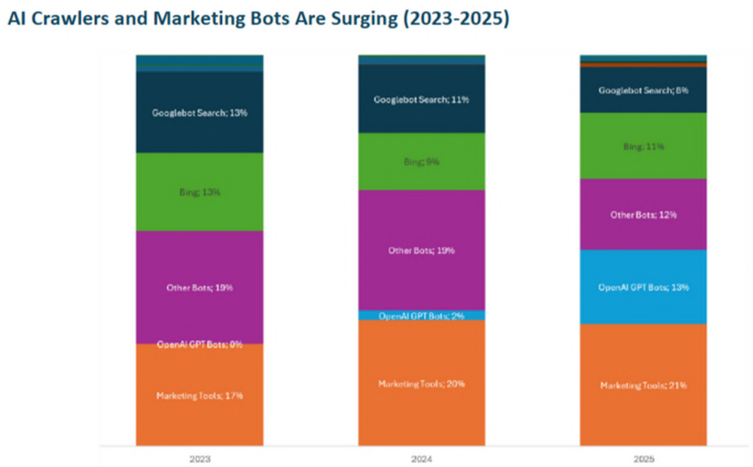
This isn’t just a digital divide. It’s a structural shift



Who Are We Building For?

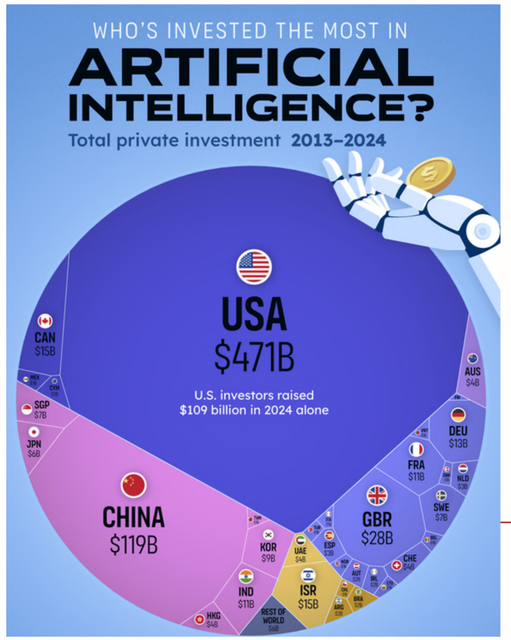
User Gap

AI-driven vs. human-driven data traffic (2020–2025)



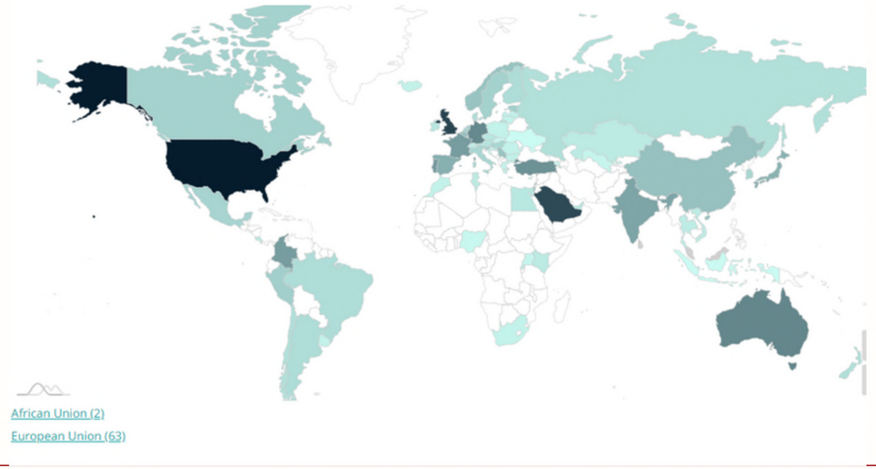
Market Centered Growth

AI investment density vs. population connectivity



Policy Blindspots

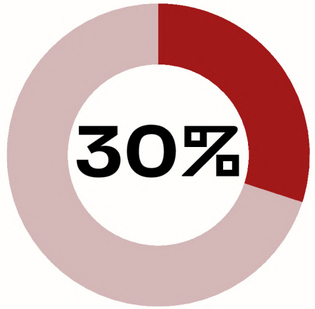
Number of national AI strategies vs. digital inclusion policies



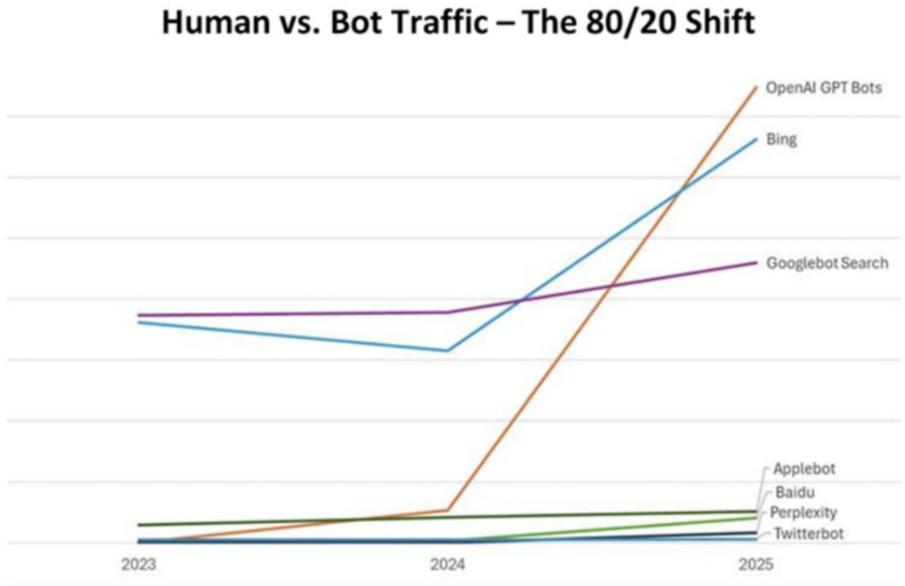
OECD.AI (, database of national AI policies,

Invisible Traffic, Visible Shift

AI crawlers, recommender systems, and agents increasingly dominate routing patterns



By 2025, ~30% of DNS traffic is machine-originated



Machine-to-machine communication reshaping infrastructure demands

Optimizing for AI—what does that mean for people?

01

Prioritizing machine efficiency: AI-first optimization dominates infrastructure decisions.

- Systems are optimized for latency, not for affordability

02

Risks of sidelining human connectivity: AI-driven routing may deprioritize human access, .

03

Access costs widen despite broader infrastructure

04

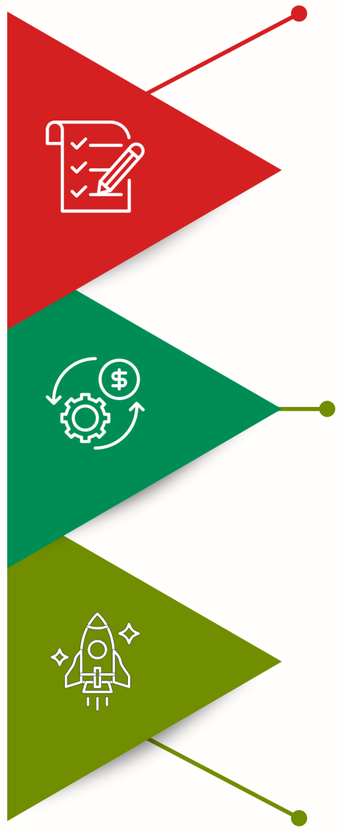
Cloud regions grow around AI need, not social need

We are unconsciously designing a digital environment where machines get better service than millions of humans.

ICANN's Strategic Pressure Point

Region	Root Servers	Avg Latency
EU	100+	• ~15ms
US	110+	• ~20ms
Africa	< 20	• ~180ms

"Root servers define the first moment of connectivity. And right now, that access is uneven—profoundly so



01

iCANN's responsibility for DNS equity:

IRoot server placement affects global access.

02

Root server distribution impacts access:

Affluent regions benefit most from optimized routing speeds.

03

DNS governance shaping digital equality:

ICANN plays a crucial role in balancing infrastructure design

Infrastructure follows investment but investment follows AI."

- AI consumes vast resources. But beyond power, it redirects investment away from universal access efforts, shaping a future where infrastructure always favors corporate profitability first.

- IF infrastructure always follows profitability and latency, underserved regions stay stuck as consumers—never creators.The risk isn't just climate cost. It's permanent digital dependency."

AI requires energy, cooling, low-latency links

Global infrastructure is following capital, not communities

Risk: structural dependency, not inclusion

"WHEN INFRASTRUCTURE SKIPS PEOPLE, IT ALSO SKIPS SOVEREIGNTY.

"The Three Governance Voids"

1- Who routes traffic? (CDNs, hyperscalers)

- Hyperscalers control AI-driven data flows—global optimization outweighs regional access needs.

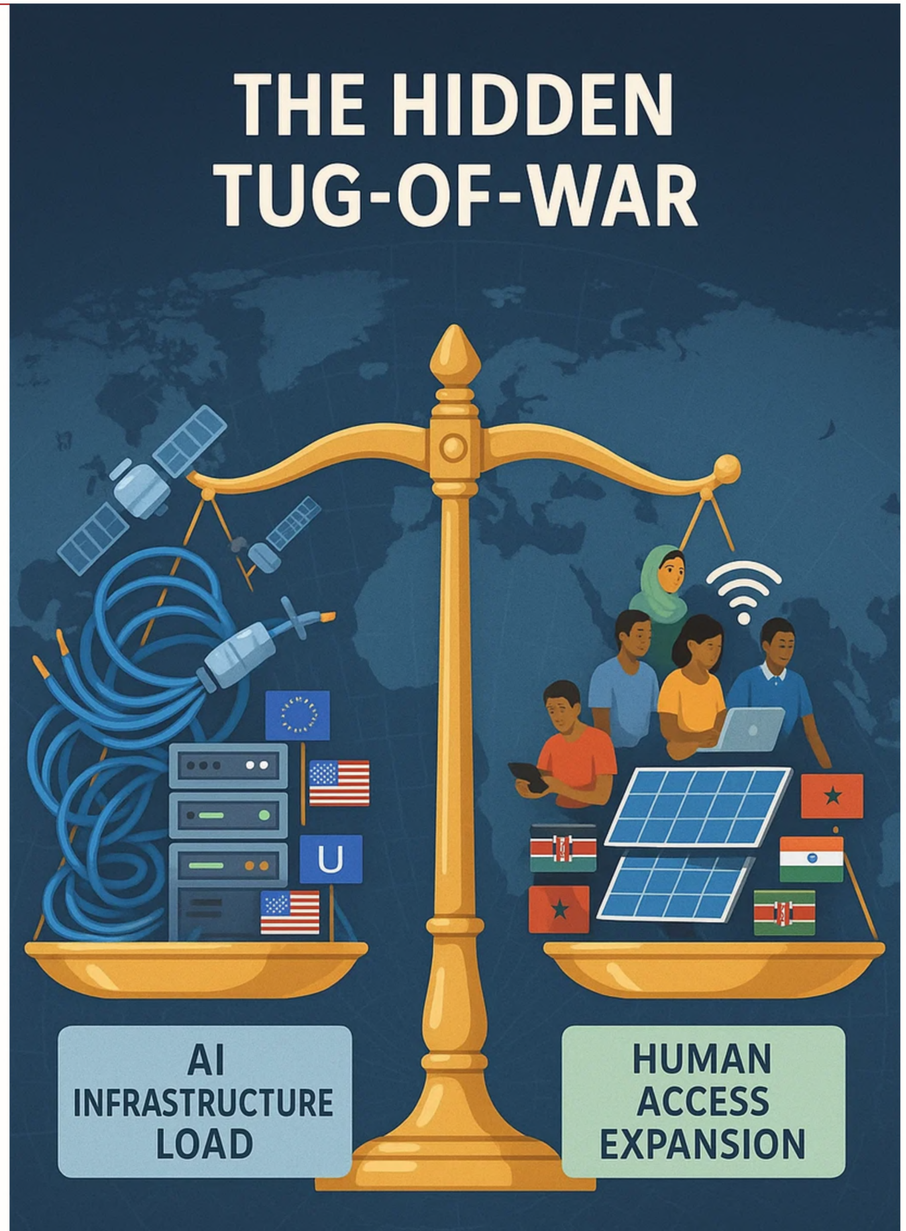
2- Who governs DNS equity? (ICANN)

- DNS governance still lacks deep engagement from underserved populations.

3- Who speaks for the offline majority?
(Civil society, underserved regions)

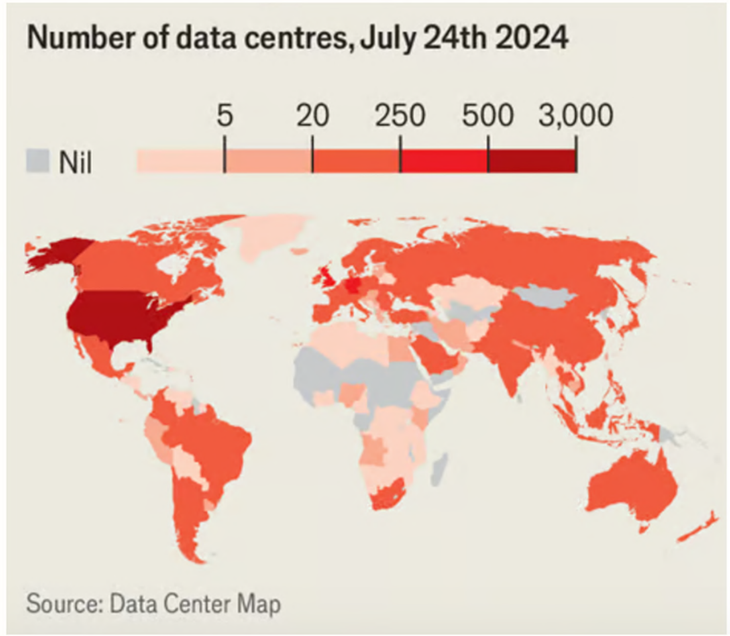
Offline communities are left unrepresented in AI-era decision-making.

Governance isn't about replacing markets—it's about protecting futures. These gaps must be filled by design—not afterthought



Rebalancing from the Ground Up

- Today’s infrastructure is optimized for market logic.



Current data center clusters

- But what if it were optimized for dignity, resilience, and community needs instead?”

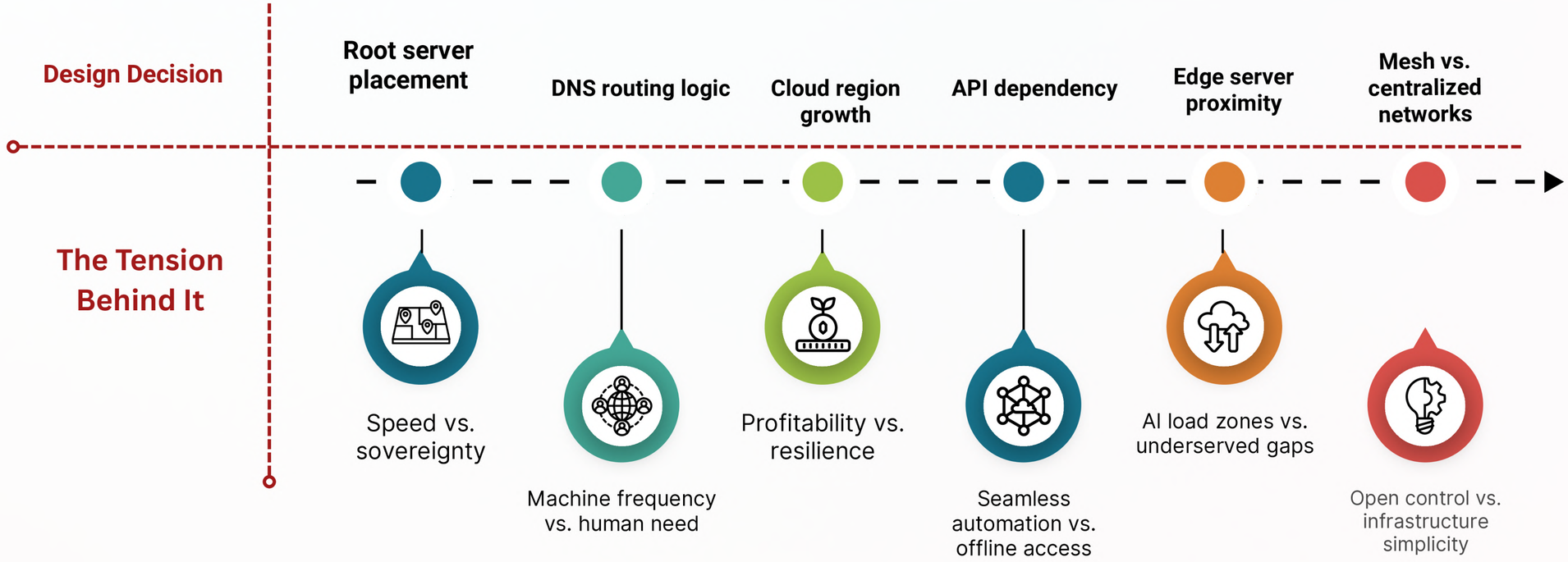
Current Reality	Inclusive Design (Future mesh networks, public ISPs, co-designed DNS deployment)
Infrastructure follows GDP + latency metrics	Infrastructure follows demographic need + human rights
Edge servers placed where AI demand is highest	Edge capacity distributed based on access gaps
Top-down deployment by private sector	Participatory design with local stakeholders
Vendor lock-in + cloud dependency	Open-source, locally governed platforms

The Connectiviy Paradox

Digital Promise	What It Assumes	Who Gets It	Who's Left Out
AI for education	Stable internet, digital tools	Urban elite schools	Rural schools, refugee centers
e-Governance	Secure ID, always-on infra	Digitized cities	Paper registries, nomadic groups
AI for climate alerts	IoT, satellites, cloud streams	National labs	Farmers with 2G access
Health tech + AI triage	Real-time sensors + cloud	Urban hospitals	Clinics in remote zones

- When digital tools are built on assumptions of access, they leave behind those who've never had it."
- The new exclusion isn't about not having tech. It's about being **unseen by the systems that run it."**
- **We keep saying AI will reduce inequalitybut the truth is, inequality decides if AI shows up at all.**

Design Tensions That Shape Tomorrow"



01 **Every infrastructure layer reflects a value trade-off.**

02 **Our role is to balance performance with participation, and scalability with sovereignty.**

03 **These aren't technical defaults — they are design decisions with societal consequences.**

What Can We Do?

01 **Youth & Students**
Step into governance: Join ICANN groups, document digital access stories

02 **Policymakers**
Bridge last-mile gaps: Fund local infra + legislate equitable DNS routing policies

03 **Engineers**
Design for diversity: Build tools that assume constraints, not cloud abundance

04 **Civil Society**
Hold power accountable: Monitor who's visible in AI-driven infra decisions

05 **ICANN Community**
Redefine resilience: Rebalance root server deployment based on equity, not geography

Everyone in this room has a role in ensuring the next generation inherits a network that sees them."

“We don’t have to inherit inequality. We can code fairness into the internet’s next chapter — before AI writes it for us

“The future will be connected.
The question is—for whom?”

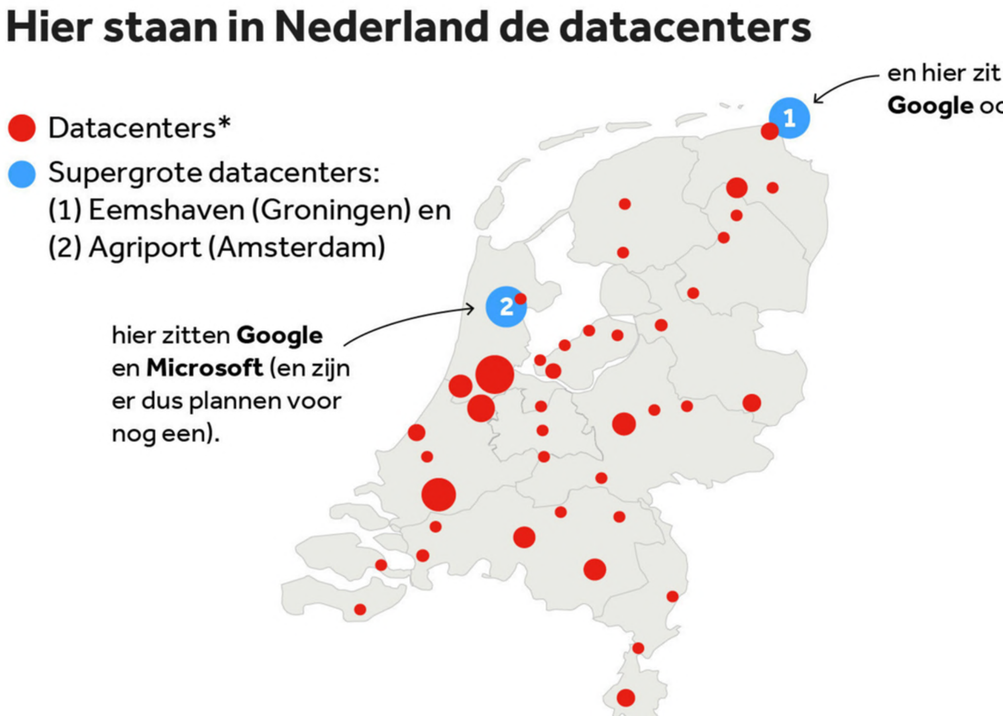
Back -up Slides

With 2.6 billion people still unconnected, how can we leverage AI for universal connectivity?

2.6 billion peoplestill lack internet access globally, limiting their ability to benefit from AI-driven services.
AI-driven infrastructure investments are projected to grow by 28.3% annually, outpacing traditional connectivity projects.

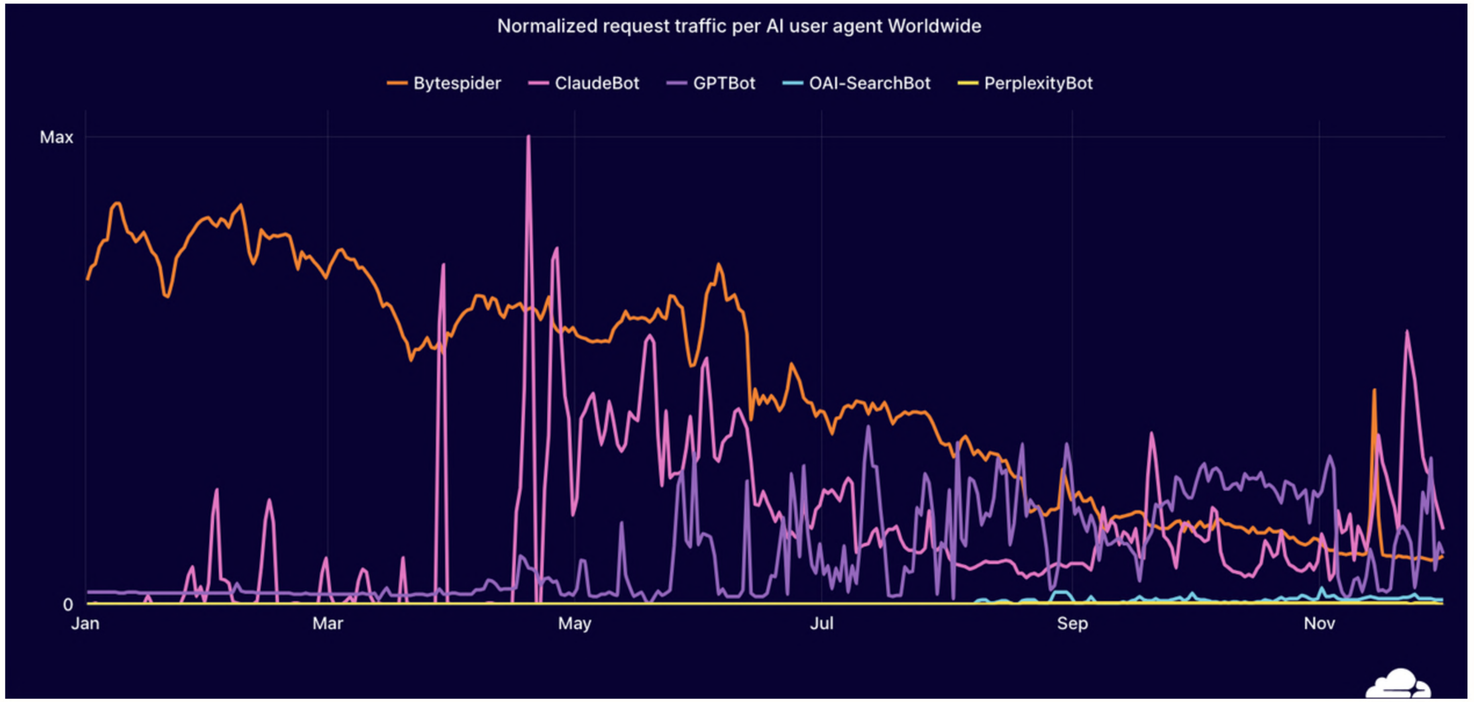
A Tale of Two Digital Worlds

- In Morocco: debate = access, infrastructure, affordability
- In the Netherlands: debate = AI scalability, energy limits, DNS strain
- Shared challenge = future of infrastructure sustainability



Slide 3: : AI Is Already Consuming the Web

- AI traffic up +251% (2024-2025)
- 90% of global AI DNS requests originate from the Global North
- AI tools now among top 50 most-visited websites



Slide 5: Data Centers: Who Has the Power? & Suistainbility

- Netherlands: ~298 data centers
- Morocco: 4 data centers
- AI = 30% annual growth in compute + energy demand

Infrastructure Sustainability = Human Access

- AI power demand = 945 TWh by 2030
- Many still offline: only 23% internet access in East Africa
- Risk: AI optimizes for elite markets, not human inclusion