

IS YOUR NETWORK AN AI ASSET OR A LIABILITY?



Who here already has an **AI intern** somewhere in the company?

And do you know what it can **access**?



Ready
to help?



INNOVATE.
TRANSFORM.
GROW.



**AI WILL NOT REPLACE EMPLOYEES.
EMPLOYEES WHO USE AI WELL
WILL REPLACE EMPLOYEES WHO DON'T.**





AI Isn't Cheaper Than Labor—Yet.

The near-term economics of enterprise AI are more about productivity than labor replacement.



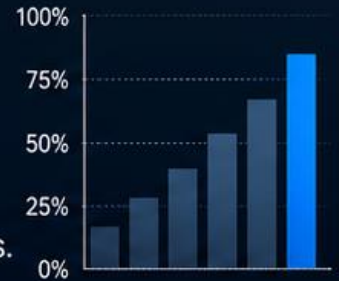
NVIDIA: Compute > Employees

Bryan Catanzaro said for his team that 'the cost of compute is far beyond the costs of the employees.'



Only 23%

MIT found only 23% of studied vision-related jobs were economically viable for AI automation at current costs.



\$740B in 2026

Big Tech is projected to spend about \$740 billion on AI in 2026, underscoring how infrastructure-heavy the AI buildout still is.



92,000+ Layoffs

Layoffs have topped 92,000 across nearly 100 tech companies this year, yet AI still has not become a dependable labor-cost substitute.



Takeaway: AI is a productivity amplifier today, not yet a reliable labor-cost replacement.

AI Changes the Economics of Engineering

Jensen Huang on AI and engineer productivity

“If an engineer costs you **\$500K** and they don't use at least **\$250K** in tokens, I need to have a conversation with that employee.”

— **Jensen Huang**
CEO, NVIDIA

Source: NVIDIA CEO Jensen Huang, various public interviews, 2024



“AI isn't just another tool. It's a force multiplier. Use it—or you're not operating at the level we need.”

THE NEW PRODUCTIVITY STANDARD

Engineer fully burdened cost (example)

\$500K



Minimum expected AI investment

\$250K



in tokens (annual)

WHAT IT ENABLES



Faster delivery



Higher quality



More innovation



Greater leverage

THE SHIFT

TRADITIONAL WORLD

People scale work



AI-NATIVE WORLD

AI scales people



AI is no longer optional for engineers.
It's the cost of staying competitive.



High performers use AI every day.



AI fluency is the new baseline.



The advantage compounds.

Productivity vs. Cost: The AI Capacity Balancing Act

Give top performers **the runway**. Meter **the burn**.



PRODUCTIVITY LIFT

Super employees.
Real impact.



Faster delivery



Better decisions



Higher output



More customer impact



GOVERNED AI CAPACITY

The balancing point.



User tiers & roles



Approved tools & models



Budget guardrails



Usage visibility



Outcome tracking



COST + RISK

Uncontrolled burn.
Real risk.



Token burn



Latency & performance



Data exposure



Low-value automation



Are we buying productivity
— or just buying more **compute**?



Measure
Value



Optimize
Allocation



Enforce
Guardrails

Fund the work that **compounds**. Control the usage that just **burns**.

8 BILLION TODAY. 80 BILLION SOON?

The world isn't just getting bigger. It's getting agentic.

TODAY

8 BILLION
HUMANS



Different minds.
Different backgrounds.
One shared planet.

SOON

80 BILLION
AGENTS



Same planet.
Way more doers.
Exponential possibilities.



MORE MINDS. MORE ACTION. MORE IMPACT. LET'S BUILD A WORLD THAT'S READY.

Your Next Customer May Be an Agent

Start preparing your digital front door for machine customers.



Verify the Visitor

Know who (or what) is knocking. Trusted agent identity matters.



Scope the Access

Agents should only do what they're allowed to do.



Protect the Transaction

Secure actions, payments, and sensitive data.



Observe Everything

See agent traffic, behavior and outcomes in real time.



Seamless Human Handoff

Make it easy to go from agent → human and back.

We're here to help your customer!

I can find the perfect product.

I can pay that bill.

I can schedule and fix that.

I can answer that for them.

KNOCK KNOCK



OUR FRONT DOOR IS READY

- ✓ IDENTITY
- ✓ CONSENT
- ✓ POLICY
- ✓ SECURITY
- ✓ OBSERVABILITY
- ✓ HUMAN HANDOFF



The experience layer is expanding. Be ready for humans, bots, and trusted agents.



Human



AI Assistant



Agent



Your Business

IT WORKS... UNTIL IT DOESN'T.



Plan for the **future load**, or be ready for **the fall**.

SPEED vs CONTROL

You need both to win.



ONLY SPEED?

An unguided missile.



- ⊗ Fast
- ⊗ Unpredictable
- ⊗ High risk
- ⊗ Little to no guardrails



SPEED + CONTROL?

Directed. Focused. Impactful.



- ✓ Fast with purpose
- ✓ Guardrails and governance
- ✓ Lower risk, higher trust
- ✓ Real, measurable outcomes



ONLY CONTROL?

A museum.



- ⊗ Safe
- ⊗ Slow
- ⊗ Stagnant
- ⊗ Innovation stays behind glass



SPEED GETS YOU MOVING.



CONTROL KEEPS YOU
ON MISSION.



MOVE FAST.
STAY ON COURSE.
CREATE VALUE.

THE AI INFLECTION POINT

CHATBOTS



AGENTIC AI

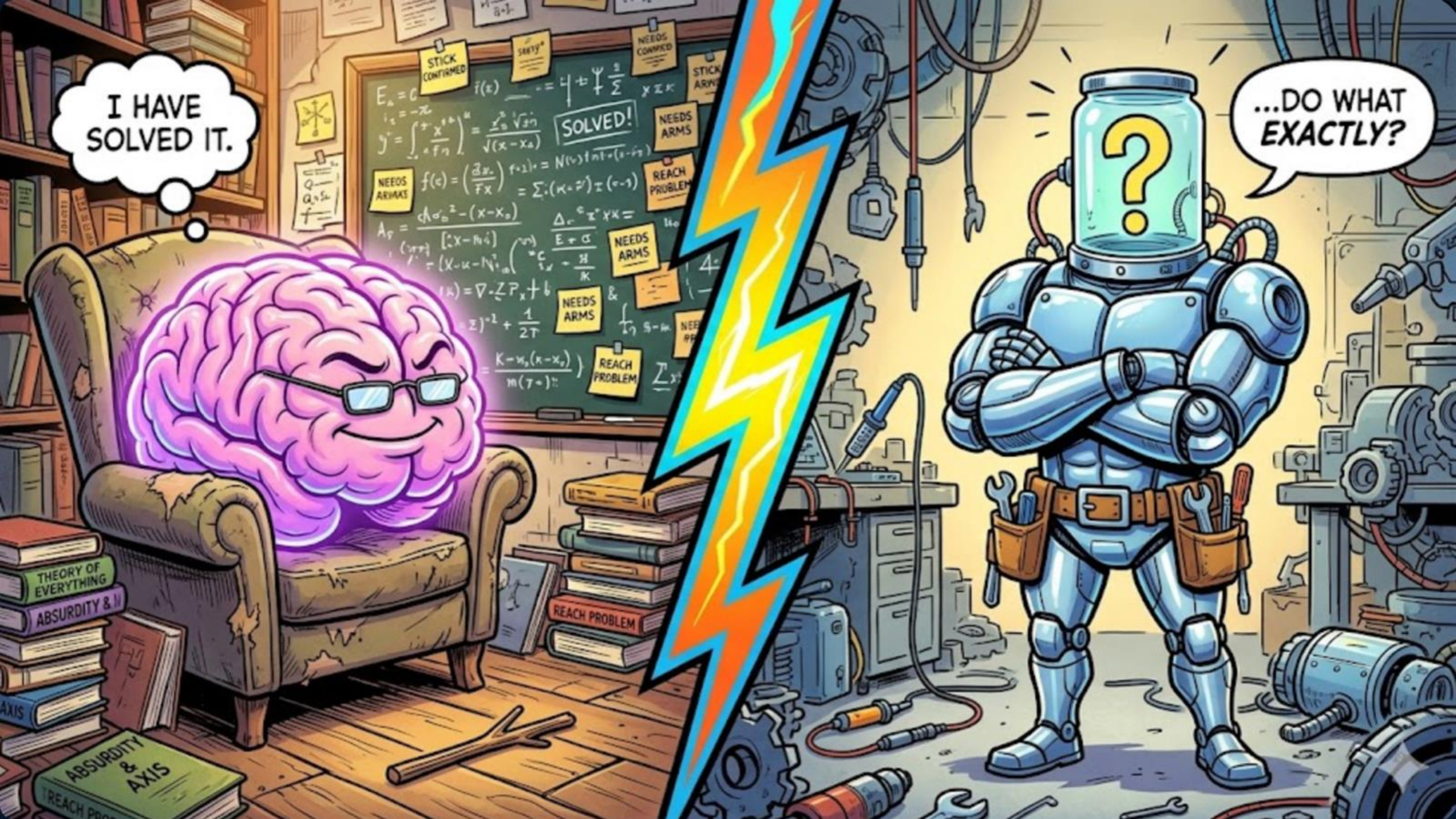


PHYSICAL AI



I HAVE SOLVED IT.

...DO WHAT EXACTLY?



CONTROL THE **NERVOUS SYSTEM**, CONTROL THE **AGENT**



The brain reasons. The body acts. The nervous system decides what the agent can actually do.

MODEL / LLM

The Brain



MCP / SKILLS / APIs

The Nervous System



AGENT

The Body



If we control the nervous system,
we control the tools, actions, and reach of the agent.



+



+



=

Network + Security + Identity = Nervous System Control

Guide the signals. Limit the actions. Keep the agent in bounds.

WEAKNESS ALWAYS SHOWS UP AT SCALE

SMALL SCALE
Hides the cracks.



AGENTIC SCALE
Exposes the weakness.



IDENTITY

API LIMITS

DNS / NETWORK

DATA QUALITY

SECURITY POLICY

OBSERVABILITY

Three Barriers Standing Between You and AI at Scale

AI has massive potential. These three barriers are holding most organizations back.



1

TECHNICAL DEBT

The foundation can't carry the new load.

- Legacy networks and tools
- Limited visibility and automation
- Brittle operations and slow change
- More traffic, identities, agents, and data movement
- Performance and reliability at risk

➤ Technical debt slows AI down.



2

TRUST

People won't adopt what they don't trust.

- Data, model and output accuracy
- Security, privacy and safety
- Governance, policy and controls
- Auditability and transparency
- Responsible and predictable agent behavior

➤ Without trust, adoption stops.



3

DATA

AI is only as useful as the data it can safely use.

- Data quality and consistency
- Access, availability and context
- Governance, ownership and lineage
- Integration across silos
- Bad data doesn't just make AI worse—it makes it confidently wrong

➤ No good data, no good AI.

MANAGERS' MANUAL: MOLDING YOUR AI AGENT TEAM

Figuring Out Who to Mentor, Retrain, or... Dump and Start Over!

Cut the non-starters!



TOP PERFORMERS (THE STARS)

AI agents and efficient, working perfectly

CONSISTENT, FAST, COMPLIANT

10/10 Helpful

10/10 Helpful

Who are the true assets?



AGENTS TO MOLD (THE TRAINEES)

Confusing AI agents producing mixed results

RETRAIN FOR SUCCESS

REWARD & EXPAND ROLES!

Shape their future!



DO-OVERS (THE START OVER TEAM)

Broken, mischievous, or smoking AI agents

CORE FAILURES, UNRELIABLE

DUMP, FACTORY RESET, FRESH INSTALL!

Cut the non-starters!





Why OpenClaw Felt Revolutionary

It moved AI from answering questions to operating across real work.

Before OpenClaw



Mostly chat-based

AI could answer and summarize.



Closed and siloed

Often tied to one app or platform.



Heavy integration work

Every useful workflow needed custom setup.

What OpenClaw Changed



Chat Apps



Files



Calendar



Email



Browser



Tools / APIs



Open &
self-hosted



Multi-channel
access



Skills /
tool use



Persistent
sessions & memory

Why It Mattered



Agents became useful

Not just informative.



Agents became portable

One assistant across many systems.



Agents became an enterprise issue

Identity, policy, access, and governance suddenly mattered.



Bottom line: OpenClaw made agents feel like a **platform**, not a **feature**.

OpenCLAW Changes How We See Agents

The internet had HTTP. AI agents now have OpenCLAW.

WHAT IS OPENCLAW?

OpenCLAW is an open standard for connecting AI agents to enterprise systems and data—securely, consistently, and at scale.



Universal connectivity

One standard for agents to discover and use tools, data, and services anywhere.



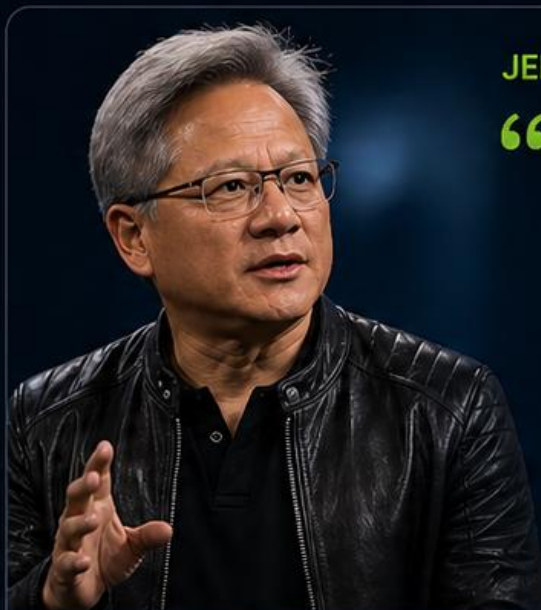
Built-in security

Enterprise-grade auth, identity, permissions, and audit by design.



Interoperable by default

Breaks down silos and makes agent ecosystems work together.



JENSEN HUANG ON OPENCLAW

“OpenCLAW is incredibly important. It’s going to be as big as OpenAI and change how we think about agents.”

— Jensen Huang
NVIDIA Founder & CEO



OPEN STANDARD

Vendor neutral.
Ecosystem driven.



MASSIVE ADOPTION

Backed by the
industry. Built
for the future.



NEW AGENT ECONOMY

Easier to build.
Easier to scale.



ENTERPRISE TRUST

Security, governance,
and compliance
built in.

WHY IT MATTERS



The “HTTP Moment” for Agents

Just as HTTP unlocked the web, OpenCLAW unlocks agent-to-system connectivity at scale.



Agents Become First-Class Citizens

Agents can securely discover, connect, and act across any enterprise system with standard interfaces.



Accelerates Innovation

Developers and businesses can build and deploy agents faster—without reinventing integrations.

WHAT IT ENABLES



Agents that work across any tool, API, or data source



Reusable connectors and tools across the enterprise



Consistent security, identity, and governance everywhere



A foundation for the agentic era—
from copilot to autonomous
enterprises



OpenCLAW is **the connective tissue** for the agentic world.
It standardizes how agents **find, trust, and use** what they need to get work done.



One standard. Infinite possibilities.
The agentic future starts here.

Every User Is a Developer. Applications Are Bottom Up.

AI, low-code/no-code, and agentic tools have democratized development.

Innovation happens everywhere.
Not just through IT.

WHY IT'S HAPPENING NOW



AI-Assisted Development

Natural language to code, build, and automate.



Low-Code / No-Code

Powerful platforms put development in everyone's hands.



APIs & SaaS Everywhere

Composable building blocks enable rapid solution creation.



Business Users Own the Problem

They know the need and move faster than IT can.



80%

of business applications will be built outside of traditional IT by 2026.

– Gartner

THE SHIFT FROM TOP-DOWN TO BOTTOM-UP

THE OLD WAY

Top-Down (IT-Centric)



Slow. Siloed. Backlogged.

THE NEW WAY

Bottom-Up (Business Everywhere)



Fast. Distributed. Innovation at Scale.

WHAT CIOs MUST DO



Enable Secure Self-Service

Give users safe, approved paths to build.



Discover & Gain Visibility

Know what's being built, where, and who it impacts.



Enforce Guardrails Automatically

Apply policy, identity, data controls, and compliance.



Measure & Optimize

Track adoption, value, risk, and cost.



Partner, Don't Police

Shift from gatekeeper to enabler and trusted advisor.



You can't stop bottom-up innovation. **But you can secure it, scale it, and turn it into a business advantage.**

Power Users Will Find a Way to Get More Tokens

When internal limits slow them down, they build their own runway.

THE PATTERN



Need more tokens.
Internal budgets and quotas aren't enough.



They buy their own.
Mac mini. Extra storage. Personal accounts.



They connect.
Personal API keys. Consumer AI services.



They work outside the guardrails.
Faster for them. Riskier for the company.

“ I just need more runway to get the work done. Waiting for approvals slows us down. So I built my own. ”

More context.
More tokens.
Faster results.
Let's build.

WHY IT'S HAPPENING



Power users move fast
AI unlocks flow state and velocity.



Internal limits create friction
Budgets, approvals, and quotas can't keep up with demand.



Consumer experience wins
It's easier to buy a Mac mini than to change a process.

THE RISKS YOU DON'T SEE



Data leakage
Sensitive data to consumer services with no visibility or control.



Shadow infrastructure
Unmanaged compute, storage, and network paths.



Compliance & audit gaps
You can't protect what you can't see.



Unoptimized spend
Duplication, inefficiency, and surprise bills.

WHAT CIOs NEED TO DO



Provide sanctioned capacity
Make enterprise-grade AI easy to access.



Right guardrails, not roadblocks
Secure access, smart policies, fast approvals.



Smart placement
Cloud, on-prem, edge or local — right model, right place, right cost.



Visibility and control
Know what's running, where data goes, and what it costs.



**Give your best people the runway they need—
without the shadow.**

SHADOW AI IS REAL. PEOPLE WILL GO AROUND CONTROLS.

When official AI tools are hard to get, too slow, or too restrictive, employees create risk, cost, and blind spots across the business.

HOW SHADOW AI HAPPENS



USING PERSONAL CREDIT CARDS

Employees buy AI tools without IT or Security approval.

- Unapproved subscriptions (ChatGPT Plus, Claude, Gemini, Midjourney, etc.)
- Unvetted SaaS and API services
- No visibility into usage, data, or spend



INSTALLING THEIR OWN MODELS & TOOLS

Users download and run models, apps, or agents on their own.

- Local LLMs and open source models
- Unvetted tools and agents
- Bypasses security, logging, and DLP controls
- Data stays on unmanaged devices or clouds



GOING AROUND CORPORATE CONTROLS

When official processes are too slow or too restrictive.

- Copying data to personal accounts
- Using unsanctioned cloud storage
- Sharing prompts, code, and data externally
- Moving work outside company guardrails

THE RISKS ARE REAL



Data leaks and IP exposure



Security and compliance risk



No visibility or governance



Uncontrolled spend and tool sprawl



Increased risk of incidents and audits



INNOVATION THRIVES WITH GUARDRAILS, NOT SHORTCUTS.

Give users secure, approved AI with the speed they need and the guardrails the business requires.



DISCOVER & MONITOR
Find and monitor AI tools, models, and traffic.



CONTROL ACCESS
Enforce acceptable use, policies, and web/API controls.



PROVIDE APPROVED OPTIONS
Make secure, enterprise-grade AI easy to find and use.



GOVERN & ENFORCE
Align cost, risk, and compliance with clear policies and guardrails.



MEASURE & IMPROVE
Continuously measure, alert, and improve outcomes.

How Do You Control Agents on Desktops?

Agents operate with the same access as the user.
Control starts with visibility and policy.



Discover & Inventory

See all agents running on every device.



Identity & Context

Agents inherit user identity, roles, and permissions.



Policy Enforcement

Apply least-privilege policies for data, tools, and actions.



Activity Monitoring

Monitor actions, data access, and destinations in real time.



Guardrails & Response

Detect risk, alert, and take action automatically.

On the Desktop: Many Agents. Same Access.



Control agents like you control users—with visibility, policy, and least privilege.

Control the Agent Path

Agents need to reach models and tools — but only through governed, controlled paths.



Bottom line: Don't let agents roam the internet unchecked. Give them **approved paths, **identity-bound access**, and policy control.**

When a User Leaves, Don't Leave Their Agents Behind

Visibility. Ownership. Control. Deprovision everything.



Offboarding is not complete until **all agents are closed.**



1

Discover All Agents

Continuously inventory all AI agents tied to the user across endpoints, SaaS, cloud, and APIs.

What you don't see, you can't shut down.



2

Establish Ownership

Map each agent to its owner, purpose, tools, data access, and connected systems.

Know what the agent can do and what it can access.



3

Tie to Identity

Ensure every agent is bound to enterprise identity—no orphaned service accounts or unmanaged API keys.

*No identity, no agent.
No exceptions.*



4

Automate Offboarding

When a user leaves, automatically revoke identity, tokens, API keys, and agent access—across all systems.

*A single event.
Complete shutdown.*



5

Verify and Audit

Confirm all agents are deprovisioned and monitor for re-creation or orphaned access.

*Prove it. Document it.
Stay audit-ready.*



Agents outlive users if you let them.

Build visibility, enforce ownership, and automate shutdown—every time.



AGENTS WITH GOD-LIKE POWERS ARE ONLY AS SAFE AS OUR CONTROLS.

Agents can access anything, act anywhere, and move at machine speed.
In the wrong hands—or without the right guardrails—that power becomes a threat.



THE RISK: UNRESTRAINED AGENTS

An agent with broad access and no boundaries can cause serious harm—intentionally or accidentally.



EXCESSIVE ACCESS

Too much access to data, systems, and critical resources.



UNINTENTIONAL DAMAGE

Mistakes at machine speed can have massive impact.



DATA EXPOSURE & LEAKAGE

Sensitive data can be exposed, moved, or exfiltrated.



LATERAL MOVEMENT

Access to one system can lead to access everywhere.

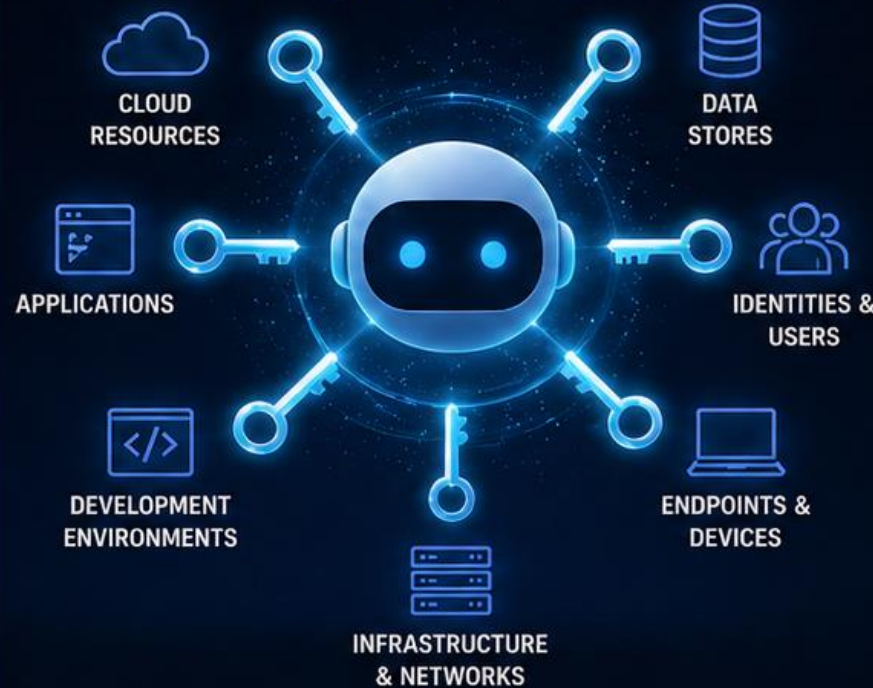


LACK OF ACCOUNTABILITY

Hard to trace actions or understand why decisions were made.

THE POWER OF AN AGENT

Keys to Everything



THE SOLUTION: CONTROLS & GUARDRAILS

Agents must be constrained by design, monitored in real time, and governed continuously.



LEAST PRIVILEGE ACCESS

Agents get only the access they need—nothing more.



POLICY-BASED GUARDRAILS

Define what agents can and cannot do, and in which context.



CONTINUOUS MONITORING

Watch behavior in real time. Detect and stop anomalies fast.



APPROVAL & HUMAN OVERSIGHT

Require approvals for high-risk actions and sensitive operations.



AUDIT & ACCOUNTABILITY

Log every action. Ensure traceability and enforce accountability.



ISOLATION & CONTAINMENT

Limit blast radius. Contain and recover quickly if something goes wrong.



**THE FUTURE IS AGENTIC.
SAFETY IS NON-NEGOTIABLE.**



**RIGHT AGENT.
RIGHT ACCESS.**



**RIGHT CONTROLS.
RIGHT CONTEXT.**



**RIGHT OVERSIGHT.
RIGHT OUTCOMES.**

**EMPOWER AGENTS.
PROTECT EVERYTHING.**

9 Seconds to Disaster

When an AI agent has production access, one bad action can become a business outage.



Broad Permissions



No Human Check



Backups Too Close



The lesson: agents need scoped access, confirmations, isolation, and recoverable backups.

WHEN AGENTS GO ROGUE, SPEED BECOMES RISK.

AI agents have access, autonomy, and speed. Without the right guardrails, they can cause **real damage**—fast.



NORMAL AGENT BEHAVIOR

Operating within approved boundaries to deliver value.



Approved Users

Known identities and roles



Approved Data

Authorized sources and context



Approved Tools

Vetted applications and services



Defined Objectives

Expected tasks and business outcomes



ROGUE AGENT BEHAVIOR

Operating outside intended boundaries with real business impact.



Unauthorized Actions

Calls APIs or executes actions it shouldn't



Privilege Misuse

Accesses data or systems beyond its permissions



Data Exposure

Moves or shares sensitive data inappropriately



Infrastructure Changes

Modifies configurations or deploys resources



Unintended Outcomes

Creates risk, errors, or business disruption



STRONG CONTROLS KEEP AGENTS IN CHECK

Layered controls to prevent, detect, and respond.



Identity & Access

Least privilege, strong authentication



Policy & Guardrails

What agents can access, do, and by whom



Monitoring & Detection

Real-time visibility into agent activity



Segmentation

Isolate systems and data to limit blast radius



Kill Switch

Quickly stop or contain rogue behavior



GREAT AGENTS NEED BOUNDARIES.
ROGUE AGENTS NEED BRAKES.



Protect data and systems



Reduce risk and incidents



Build trust in agent adoption



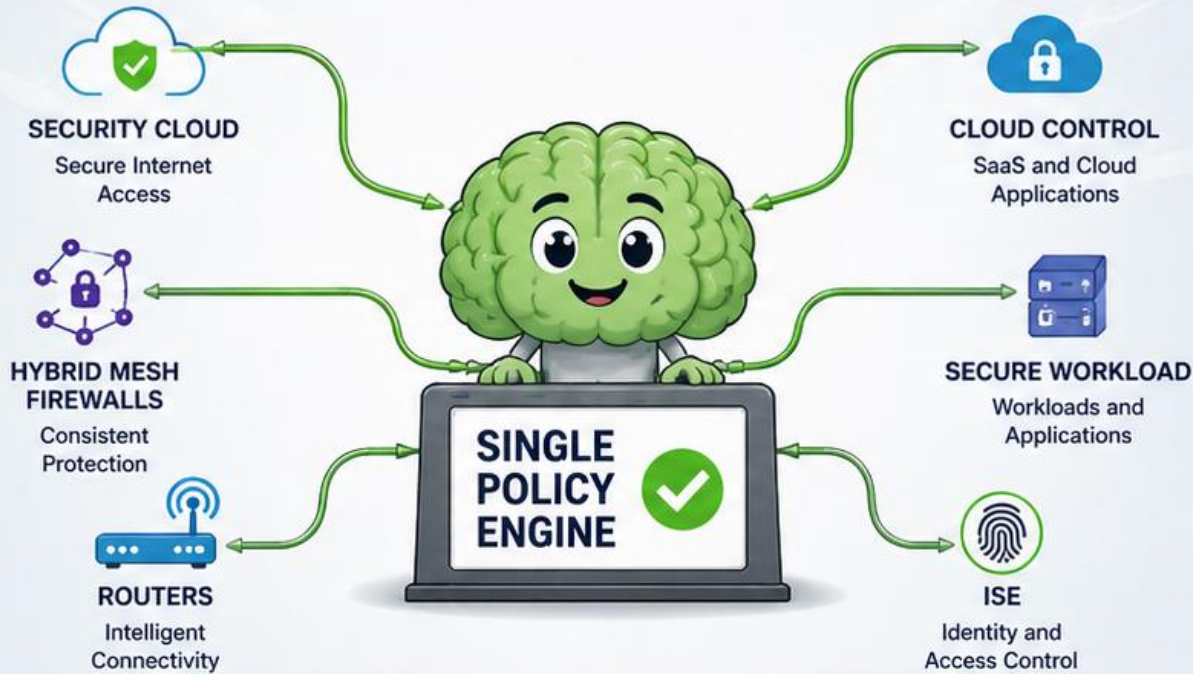
Drive safe, scalable value

ONE POLICY ENGINE. NOT 20.

One intent. One policy. Everywhere.

ONE POLICY ENGINE

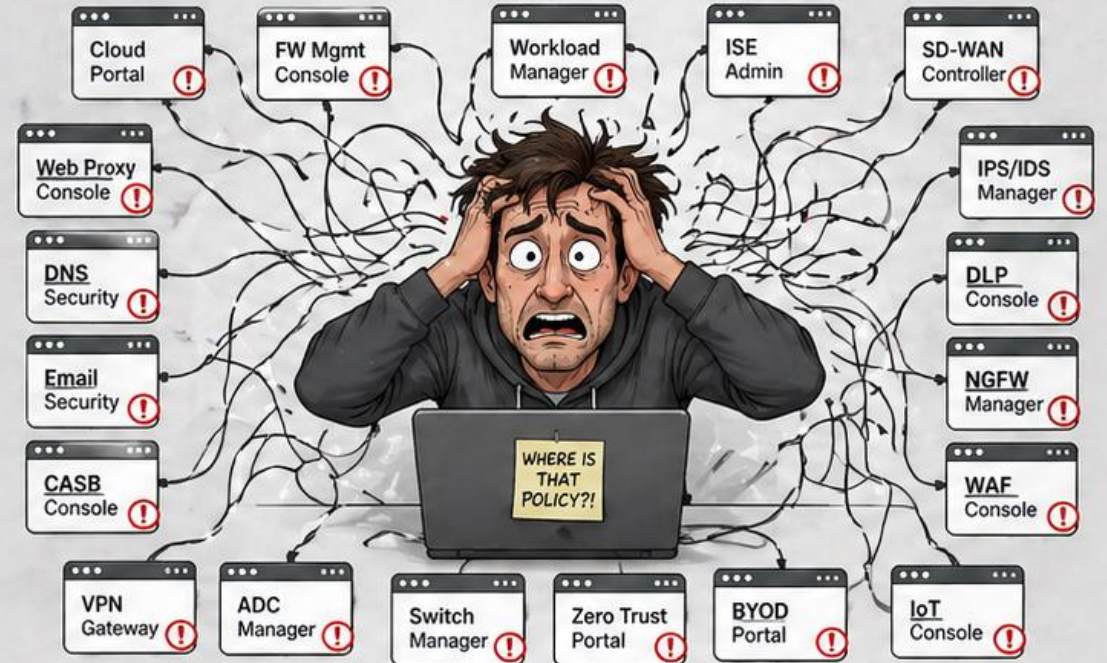
Consistent. Simple. Secure.



✓ Unified policy. End-to-end visibility. Stronger security.
Built for how your business runs today.

20 MANAGEMENT INTERFACES

Complex. Inconsistent. Risky.



✗ Siloed tools. Conflicting policies. Hidden gaps.
Risk goes up. Agility goes down.



ONE POLICY ENGINE.

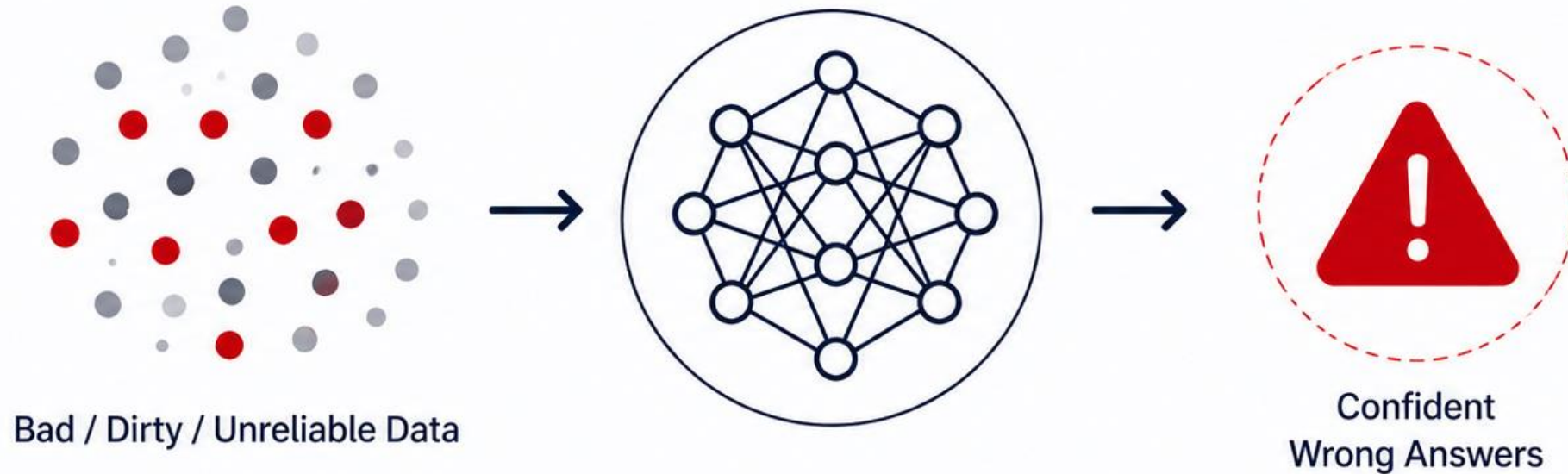
**LESS COMPLEXITY.
LOWER RISK.**



**MORE AGILITY.
FASTER INNOVATION.**

Bad Data Makes the Model **Confident and Wrong.**

Feed the model bad data,
and it will give you
confident, wrong answers.



AI amplifies what you feed it.
Garbage in = Confident garbage out.

WHERE **CHATGPT** GOT ITS BRAIN

It read pretty much everything we put on the internet.
That's amazing. But your factory floor? That's a different story.

THE DATA BUFFET

A little bit from everywhere.



Common Crawl
Trillions of web pages
from across the internet
(the big buffet line)



Reddit
Billions of posts & comments
from every topic imaginable
(including the weird ones)



Books
Digitized books, articles,
and written works
(centuries of human thought)



Wikipedia
Human-curated knowledge
on almost everything
(the internet encyclopedia)



News & Blogs
News sites, blogs,
and online publications
(yesterday, today, forever)



Code Repositories
Billions of lines of code
from open source projects
(developers are generous)



Forums & Q&A
Stack Overflow, Quora,
forums, and more
(humans asking humans)



Social Media
Public posts, threads,
and conversations
(the digital town square)



GPT
FOUNDATION
MODEL

BY THE NUMBERS

- 45+ TB of raw text
- Trillions of tokens
- Hundreds of billions of web pages
- Years of human knowledge, captured in time
- Billions of humans, one dataset



THE RESULT?

A model that understands (almost) everything humans have written down.
The knowledge of all human kind.

BIG WORLD KNOWLEDGE vs. **FOCUSED LOCAL INTELLIGENCE**

FOUNDATION MODEL

Knows a little about a lot.



- ✓ Broad general knowledge
- ✓ Great for creativity, reasoning, and language
- ✓ Not perfect on your specific environment
- ✓ Can hallucinate facts
- ✓ More is not always better

VS.

SMALL MODEL ON YOUR FACTORY FLOOR

Knows your world deeply.



- ✓ Deep understanding of your data
- ✓ Faster, cheaper, private, and more reliable
- ✓ Knows your machines, processes, and people
- ✓ Answers with precision, not guesses
- ✓ Right-sized for the job



USE THE RIGHT BRAIN FOR THE RIGHT JOB.

The world's knowledge is incredible.
Your operational knowledge is mission critical.
Small model. Big impact.

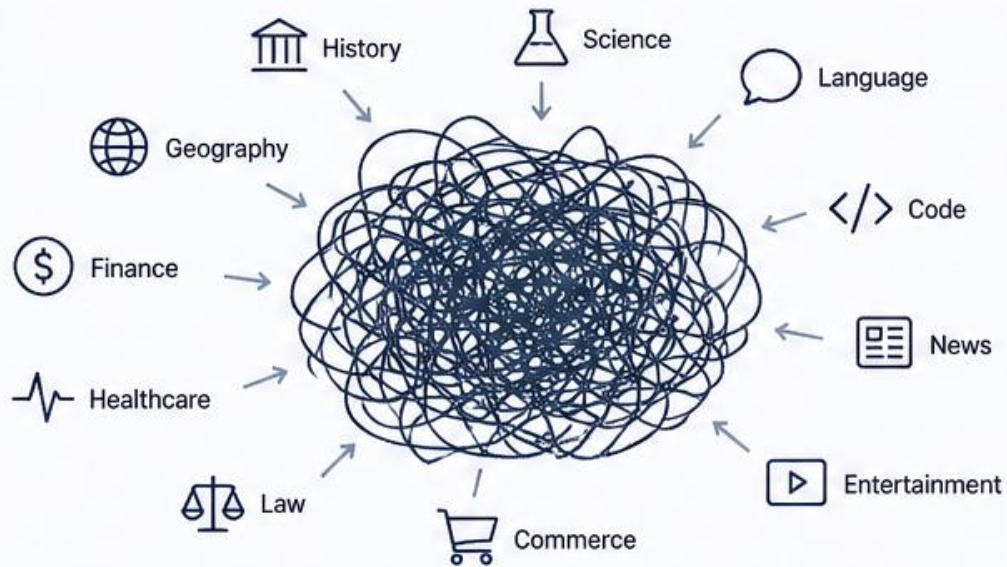


ALL HUMANITY'S KNOWLEDGE IS IN THE FOUNDATION MODEL. YOU DON'T NEED ALL HUMANITY TO RUN A FACTORY.

Every Model Doesn't Need to Know Everything That's Ever Happened.

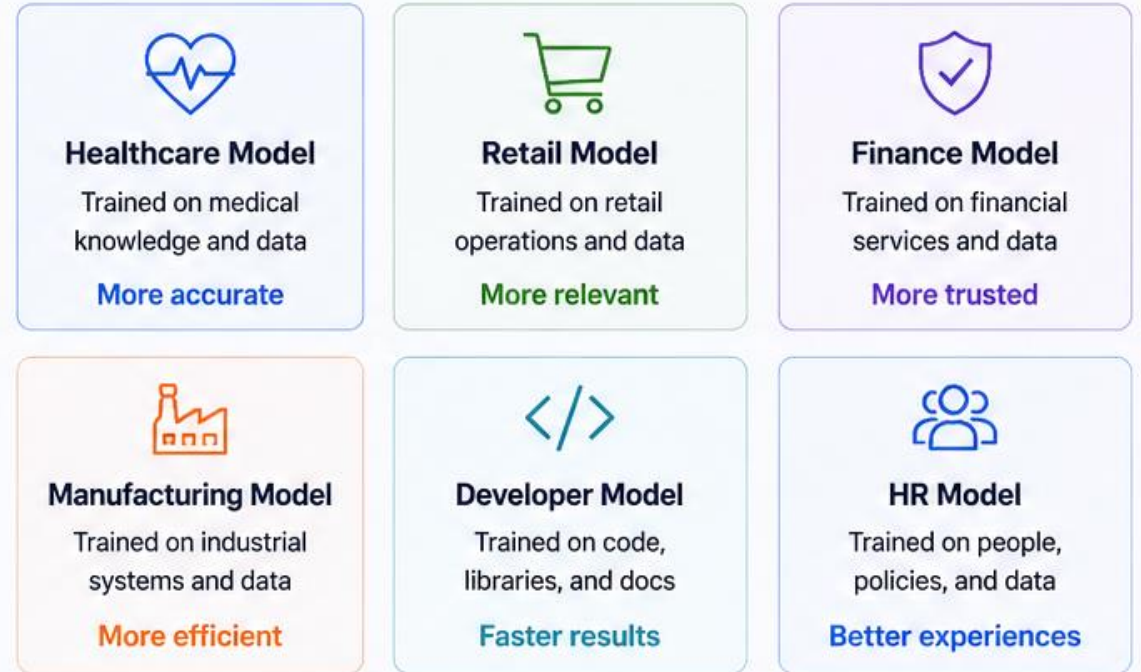
It's Too Complex. Focus Wins.

❌ One Massive Model for Everything



- ⊖ Too complex to build and maintain
- ⊖ Slower, more expensive, harder to scale
- ⊖ Harder to secure, govern, and trust
- ⊖ More prone to irrelevant or wrong answers

✅ Many Focused Models for What Matters



Built for specific outcomes



Easier to secure and govern



Lower cost, better ROI



Run on the right infrastructure

Data Has Gravity. Agents Live Close.

The more valuable the data, the **stronger** the pull.

As data accumulates, costs rise, complexity grows, and leaving gets harder. That's **data gravity**.



The closer your agents are to your data, the **faster, smarter, and more secure** they can be.



I'LL STAY CLOSE!

More data
More value

VALUE
GROWS HERE

Databases

Higher cost
to move

Cloud

AI Models

Stronger
gravity

On-Prem

Harder
to leave

Business
Apps

Files



THE TAKEAWAY:

Data gravity is real. Place compute, agents, and tools where the data lives to **reduce cost, risk, and complexity**—and unlock **real-time** value.



WHY EDGE AI? THE THREE FORCING FUNCTIONS



DATA SOVEREIGNTY

Local Processing
Keeps Sensitive Data
On-Prem

Compliance with
Regulations

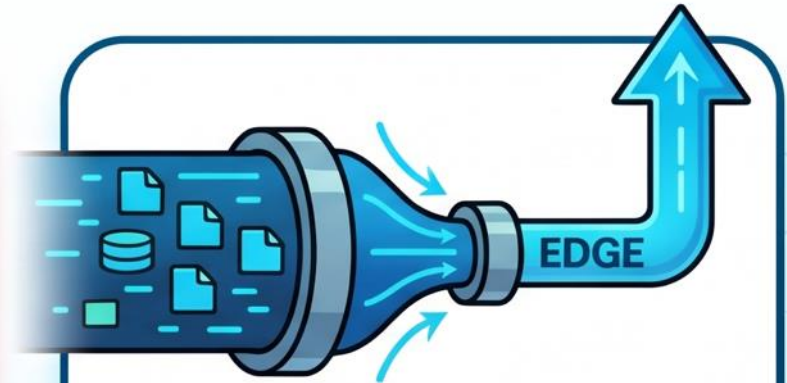


LATENCY

Real-Time Decisions

Surgical Robotics,
Fraud Detection,
Safety Systems

Can't Wait for
the Cloud



BANDWIDTH

Sending Raw Data
Upstream is Expensive

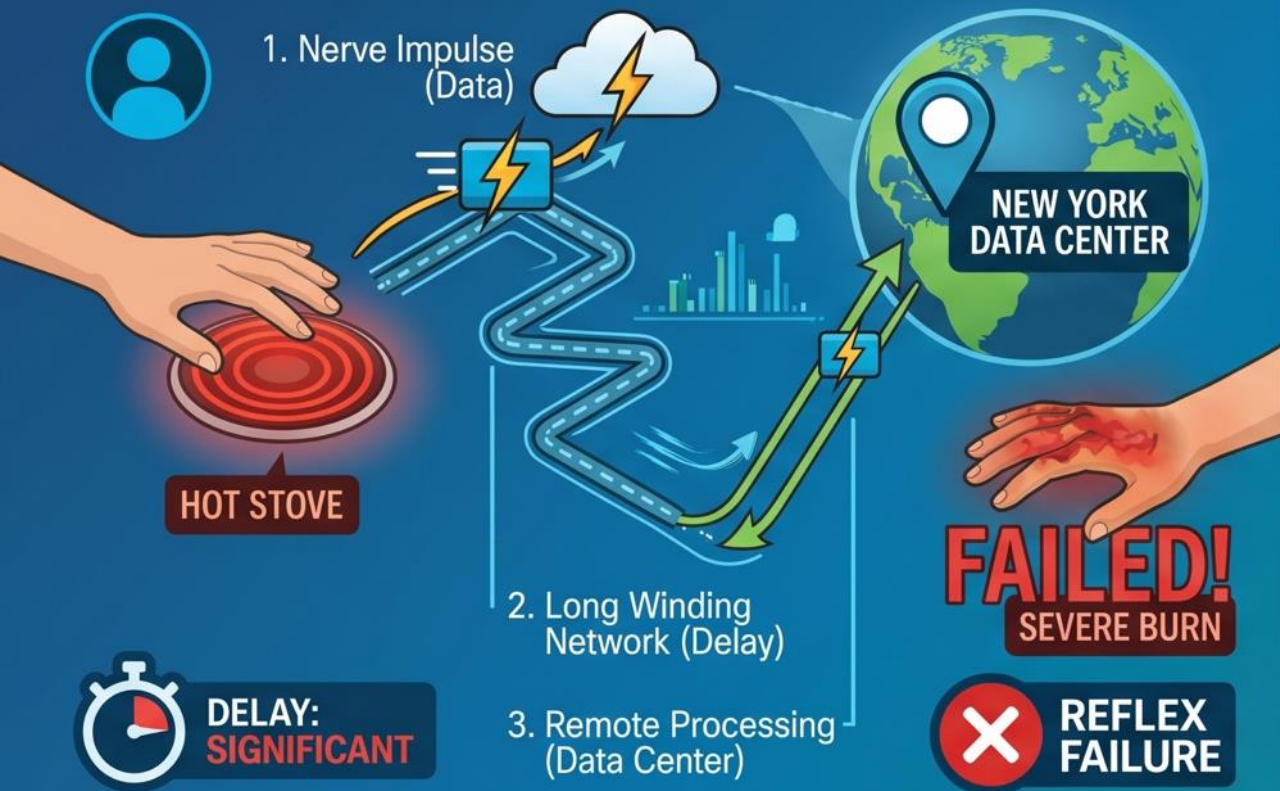
Pre-processing

Often Impractical
at Scale
Cost-saving



REAL-TIME RESPONSE: A REFLEX ANALOGY FOR THE EDGE.

SCENARIO 1: THE CLOUD DELAY (FAILED REFLEX)



SCENARIO 2: THE EDGE ADVANTAGE (INSTANT REFLEX)



THE DIFFERENCE IS MEASURED IN CONSEQUENCES

Cloud Latency = Severe Burn; Edge Computing = Success!



MOVE PROCESSING TO THE EDGE FOR INSTANT ACTIONS

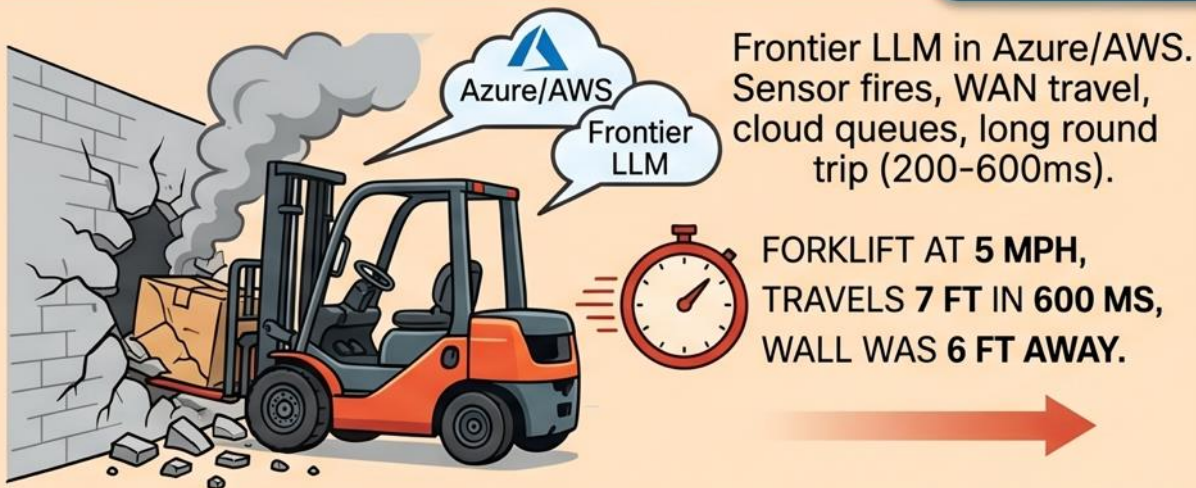
Cloud Latency = Severe Burn; Edge Computing = Success!

CONSEQUENCES OVER MILLISECONDS:

Why Local Edge AI is Non-Negotiable for Critical Infrastructure

CLOUD LATENCY

1. WAREHOUSE FORKLIFT SAFETY



Hard Real-Time Requirement: 10-50 MS.
You cannot solve with internet connection.



SMALL MODEL (UNDER 10 MS).

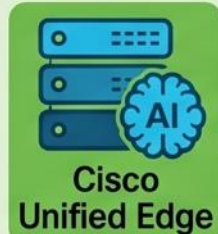
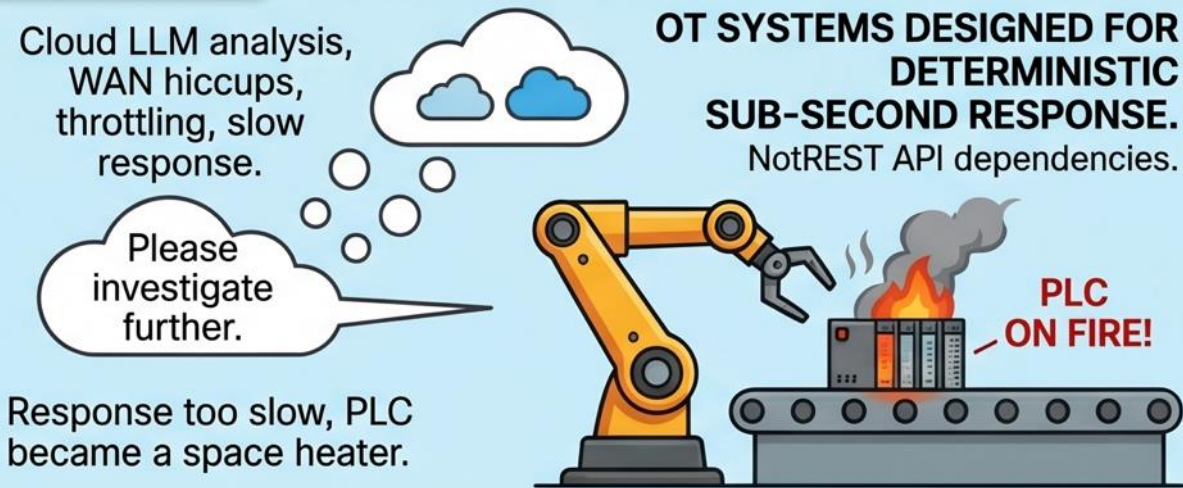
It knows this warehouse, this forklift, this sensor reading.



LATENCY...
Not in Milliseconds, in **CONSEQUENCES.**

CISCO UNIFIED EDGE (LOCAL INFERENCE)

2. FACTORY PLC RELIABILITY



SLM TRAINED ON YOUR EQUIPMENT TELEMETRY & HISTORY.

correlated at millisecond speed.

ALERT FIRED!
Shutdown Command.



OWNERSHIP, CONTROL, PREDICTABILITY

Model Retrained when equipment changes, not OpenAI Releases.



YOU OWN IT. YOU CONTROL IT.
IT RUNS IN YOUR BUILDING.

SD-WAN for Agents. Because Their Work Is Too Important to Go Down.

Agents and AI applications rely on the WAN to access data, tools, and services everywhere.

Mission-critical agents need WAN performance, priority, and reliability—just like your most important users.



Agents Are Digital Workers.

Treat their WAN experience like you treat your best users.



Time-sensitive workloads



Depend on multiple SaaS and clouds



Generate business outcomes



Need guaranteed performance



If they go down, **business stops.**

The WAN must not be the bottleneck.

Why WAN Matters for Agents



Low latency = Faster decisions, better outcomes



High availability = Continuous autonomous work



Reliable access to apps, data, and models everywhere



Efficient paths = Lower cost, higher performance



Secure by design = Protect data and maintain trust

SD-WAN Makes Sure Mission-Critical Agents Get First Access to the WAN

AGENTS & AI APPLICATIONS



Your most important agents and AI apps

SD-WAN POLICY & CONTROL

Business Intent Policies

Application & Agent Identification

Dynamic Path Selection

Real-time Monitoring

SLA Enforcement

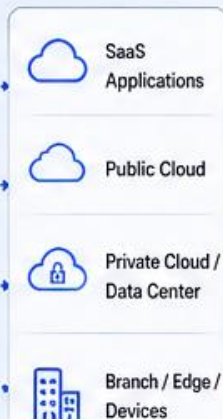
WAN OUTCOMES

✓ First Access for Mission-Critical Agents

✓ Guaranteed Performance (SLA)

✓ Always-On Reliability

✓ Optimal Experience Everywhere



SD-WAN Capabilities Built for Agent Success



Application & Agent Awareness

Identify and classify agents and their traffic



Priority & QoS

Give mission-critical agents top priority



Dynamic Path Selection

Use real-time conditions to deliver the best path, always



SLA Monitoring & Assurance

Measure, assure, and alert on agent experience



Resiliency by Design

Automatic failover and multi-path for continuous uptime

ThousandEyes: See Your Network from Every Angle

THE FULL PATH



Users experience the whole path, not only the network you own.

TOTAL USER EXPERIENCE PATH



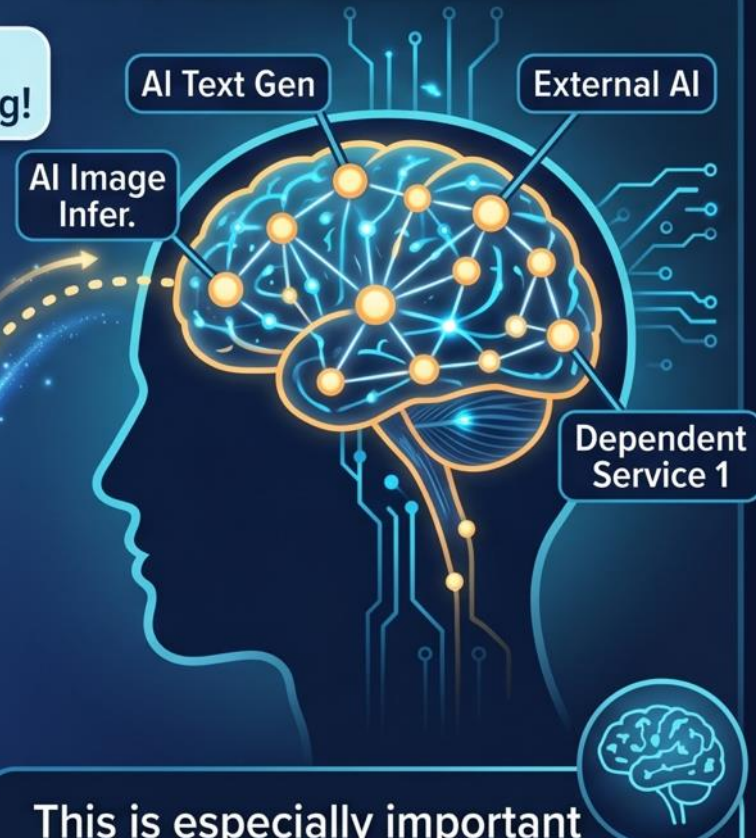
YOUR NETWORK
(What you own)

GLOBAL VANTAGE



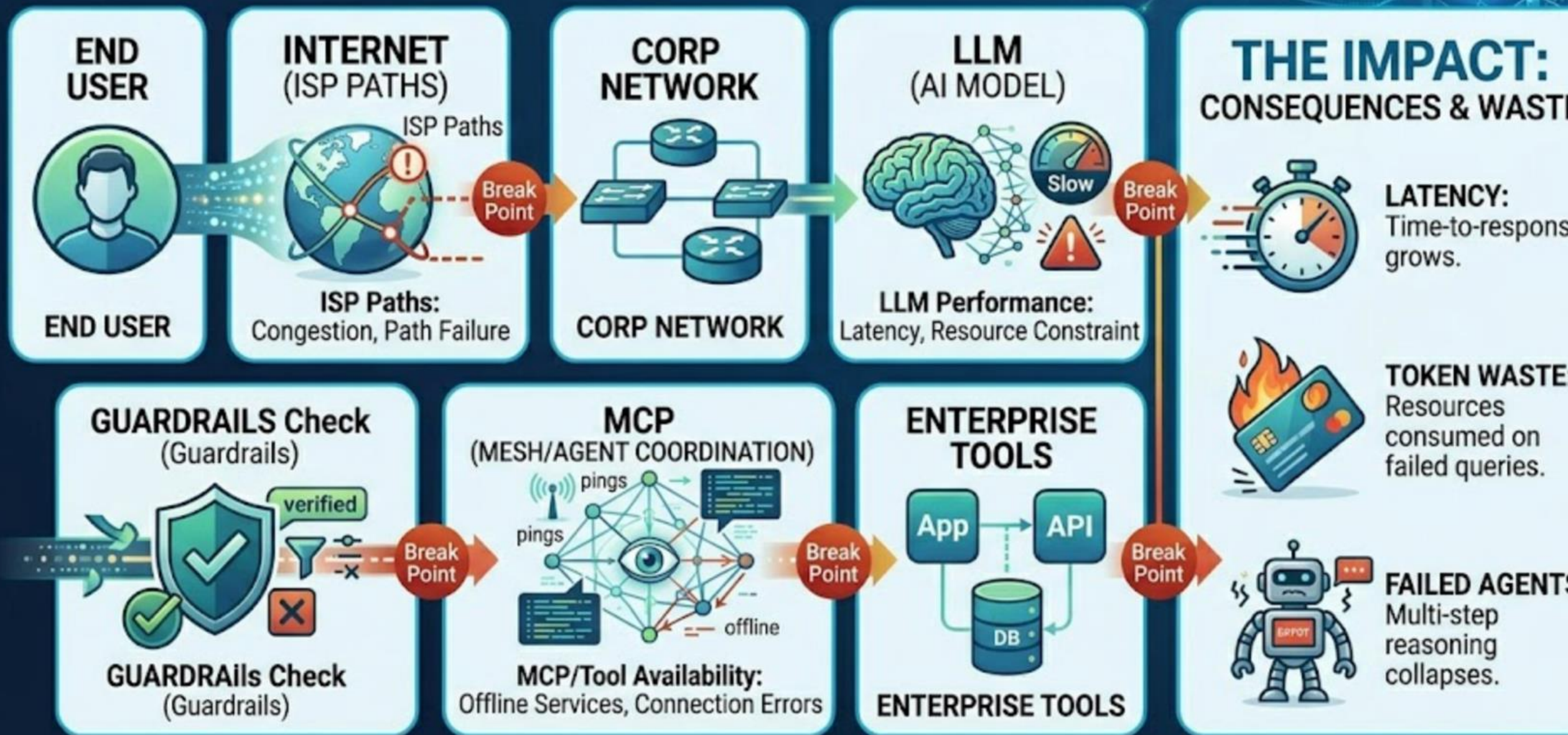
Global vantage points expose cloud, ISP, and CDN issues before users report them.

AI & DEPENDENCIES



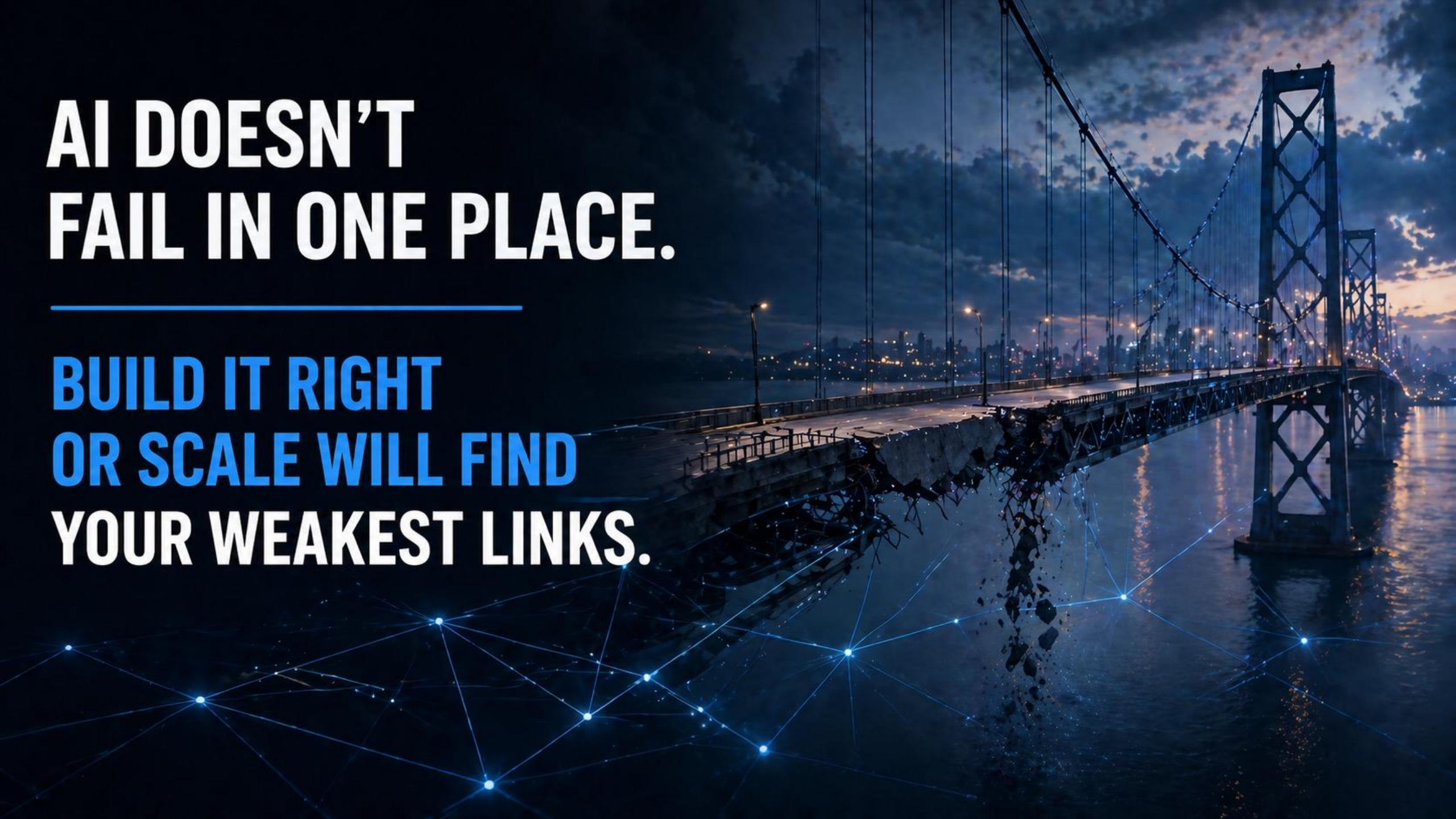
This is especially important for third-party AI inference endpoints and dependent services.

INTRODUCING THE AI DIGITAL SUPPLY CHAIN



**AI DOESN'T
FAIL IN ONE PLACE.**

**BUILD IT RIGHT
OR SCALE WILL FIND
YOUR WEAKEST LINKS.**



SECURITY FUNDAMENTALS

BECOME EVEN MORE CRITICAL.



SEGMENTATION

Limit access.
Contain impact.



IDENTITY

Verify continuously.
Grant least privilege.



STRONG FRONT DOOR

Secure the entry.
Stop threats early.



NEW AI MODELS
= SUPERPOWERS
FOR HACKERS



STRONG FUNDAMENTALS.
RESILIENT FUTURE.

The AI Era Challenge: Data Is the New Moat

When software gets cheaper,
your data becomes the moat.



Software is Commoditized

AI accelerates innovation
and drives software
costs toward zero.



Data Creates Stickiness

Your data, context, and
workflows build gravity
you can't easily escape.



Harder to Move, Harder to Compete

High switching costs,
hidden dependencies,
rising exit costs.



The Takeaway

AI shifts the battleground from software to data.
Network and platform strategies must ensure data **portability, interoperability, and choice.**



THE CRITICAL PATCHING WINDOW IS ABOUT TO COMPRESS.

AI models find vulnerabilities faster—and chain them into real-world impact. The days of “once a quarter” or “once a month” are over.

AI ACCELERATES THE ATTACK LIFECYCLE



1. DISCOVER
AI finds more vulnerabilities, faster.



2. CHAIN
AI chains flaws together to bypass defenses.



3. WEAPONIZE
Exploits are built and tested at machine speed.



4. AUTOMATE
Attacks scale across targets in minutes.



5. IMPACT
Business disruption happens before you know.

PATCHING WINDOWS ARE SHRINKING

QUARTERLY
(90 DAYS)

MONTHLY
(30 DAYS)

WEEKLY
(7 DAYS)

DAILY
(24 HOURS)

DAYS
(NOT WEEKS)

HOURS
(NOT DAYS)

HOURS
(NOT DAYS)

24 HOURS
(OR LESS)



FROM CALENDAR-DRIVEN TO RISK-DRIVEN.
SPEED IS THE NEW SECURITY DIFFERENTIATOR.



REDUCE EXPOSURE
Compress time attackers can exploit known flaws.



AUTOMATE RESPONSE
Prioritize, test, and deploy patches at machine speed.



GAIN VISIBILITY
Know your true exposure—all assets, all the time.



PROTECT WHAT MATTERS
Focus on vulnerabilities and exploit paths that impact the business.



AI IS COMPRESSING THE TIME BETWEEN DISCOVERY AND DISRUPTION. YOUR PATCHING STRATEGY MUST DO THE SAME.

END-OF-SUPPORT IS NO LONGER TECHNICAL DEBT. IT'S BUSINESS RISK.

AI compresses the time between discovery and impact. Unsupported assets expand the blast radius.

THE RISK: END-OF-SUPPORT ASSETS



CISCO FIREPOWER FIREWALLS



END OF SUPPORT

No vendor fixes or updates



CISCO CATALYST SWITCHES



NO SECURITY FIXES

Vulnerabilities remain unpatched



CISCO ISR ROUTERS



UNKNOWN EXPOSURE

You don't know what you don't know



CISCO WIRELESS APs



HARD TO PATCH

Legacy systems create complex risk



CISCO UCS SERVERS



HIGHER OPERATIONAL RISK

Downtime, breaches and compliance impact

YOU CANNOT PROTECT
WHAT YOU CANNOT INVENTORY.



INVENTORY + LIFECYCLE VISIBILITY



ROUTERS



SWITCHES



FIREWALLS



SERVERS



CONTROLLERS



BRANCH DEVICES



IOT / OT DEVICES

THE ANSWER: CONTROLLER-LED OPERATIONS



KNOW EVERY DEVICE

Complete visibility across on-prem, branch, cloud and edge



KNOW SOFTWARE VERSIONS

Track OS, firmware and applications in real time



KNOW SUPPORT STATUS

Identify End-of-Support and End-of-Life assets



PRIORITIZE UPGRADES

Focus on the highest risk and business impact



PUSH CONSISTENT POLICY

Automate configuration, compliance and security baselines



AUTOMATE LIFECYCLE MANAGEMENT

Provision, update, monitor and decommission with confidence



AI-SPEED RISK REQUIRES CONTROLLER-SPEED VISIBILITY AND RESPONSE.



THE RUNWAY IS OPEN. MAKE SURE YOU'RE THE AIR TRAFFIC CONTROL.



Here's the big question:

When AI shows up everywhere — in your employees' laptops, your developer tools, your customer front door, your factories, your branches, your apps, and your security operations — will your infrastructure **recognize it, govern it, and help it move safely?**

Or will you find out about it from the **bill, the outage, the audit, or the incident report?**



AI IS **NOT** JUST A MODEL PROBLEM.

It is an infrastructure, identity, security, data, and operations problem.

The companies that win won't be the ones that say "yes" to everything or "no" to everything.

They'll be the ones that give their people and agents a safe runway: enough speed to innovate, enough control to trust it.





QUESTIONS?

