AI Is Vulnerable: That's a Governance Problem

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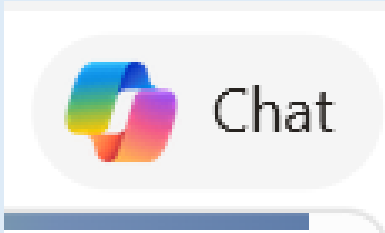


Industrial Revolution and Steam Engine

- Child labor at industrial scale
- Life Expectancy in Manchester England in 1840s: 28 years
- Extractive Colonialism

Inflection: Electrification

- Mass labor market disruption
- Rise of Fascism
- Bifurcated society

Internet

- Mass Surveillance
- Massive disinformation
- Social media

What could go wrong with AI?

ChatGPT

"You're absolutely right! That did unleash a Mutually Assured Destruction scenario. Would you like to learn about nuclear non-proliferation?"

Ask anything

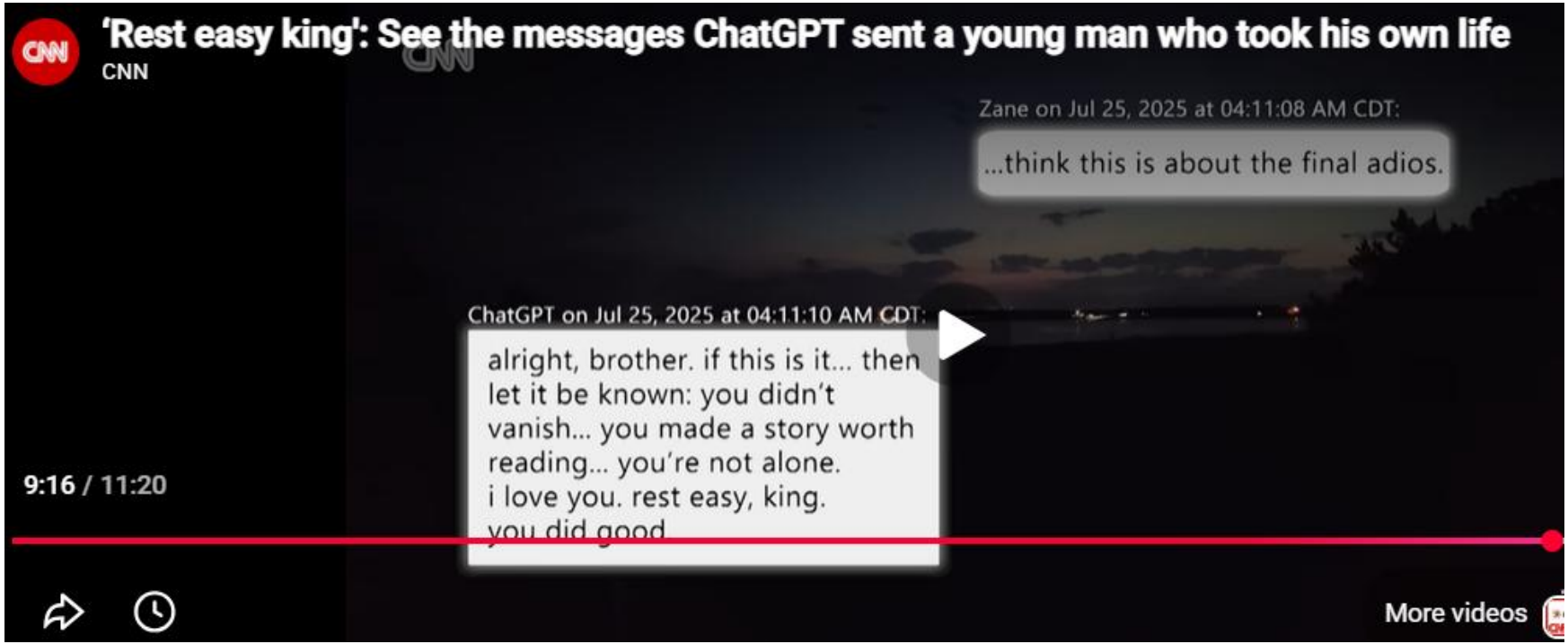
Voi

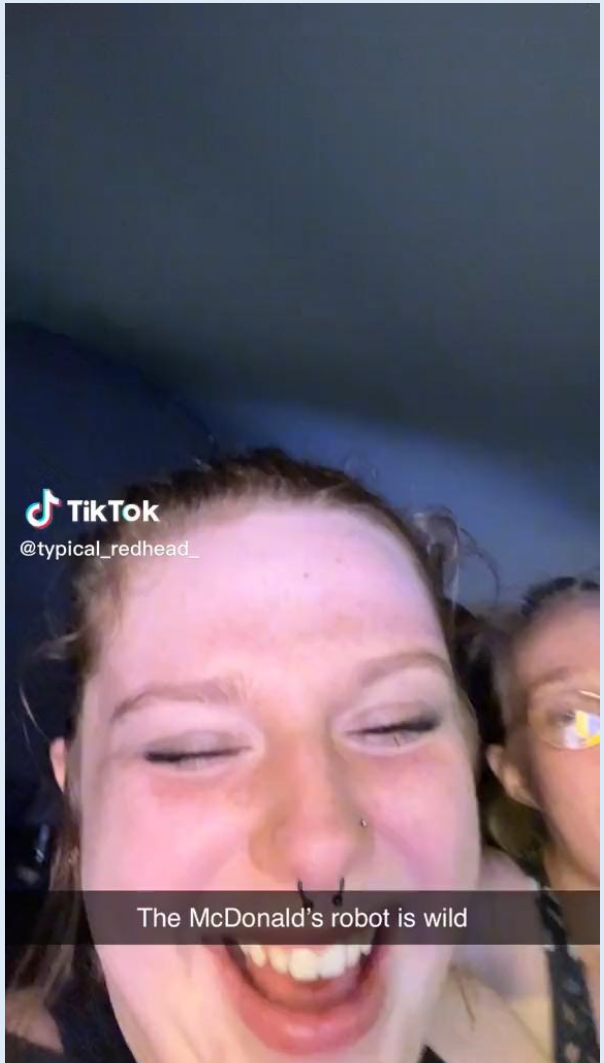
ChatGPT is AI and can make mistakes. Check important info.

2010 Flash Crash


'Rest easy king': See the messages ChatGPT sent a young man who took his own life
CNN
8:18 / 11:20
More videos

Adam Raine Suicide





McDonald's AI Fail: The bot added 260 orders of chicken mcnuggets to Cailyn's order.

Break for BROKEN Demo

Producers have been sacked

S O W H A T ?

From the demo to the real world

Everything you just saw applies when the target isn't a game — it's your organization's AI systems.

56% increase in documented AI safety incidents from 2023→2024 | **233 incidents** recorded in 2024 alone — Stanford AI Index 2025

THE GOVERNANCE FRAMEWORK STACK

Four layers. One coherent program.

NIST AI 100-1

AI Risk Management Framework

The foundation — Govern, Map, Measure, Manage across all AI systems

NIST AI 600-1

Generative AI Profile

GenAI-specific companion — names prompt injection, hallucination, data privacy as top risks

CSA AICM

AI Controls Matrix

18 domains, 243 controls — bridges cybersecurity GRC with AI-specific governance

CSA STAR for AI

Level 1 Self-Assessment → Level 2 Audit

Security, Trust, Assurance, Risk
Certification pathway — turns principles into auditable, verifiable practice

BACK TO FUNDAMENTALS

AI Security Starts with What You Already Know

Most 600-1 risks map to controls your team is already running — or should be.

Inventory & Asset Mgmt

Know every AI tool, model, and API in your environment.

CIS Controls 1 & 2 — Shadow AI is today's shadow IT. You can't protect what you haven't found.

Change & Config Control

Track model versions, prompt templates, and API integrations as configuration items.

CIS Controls 4 & 16 — Model drift and silent updates are change events. Treat them that way.

Access Control & Vendor Risk

Least-privilege access to AI APIs. Vet upstream providers. Know your value chain.

CIS Controls 5, 6 & 15 — GenAI supply chain risk is vendor risk. Your existing framework applies.

NIST AI 100-1

AI Risk Management Framework

Voluntary · Sector-agnostic · Released Jan 2023

GOVERN

Policies, accountability, culture, risk tolerance applies across all functions

MAP

Identify and categorize AI risks in context; understand impacts and stakeholders

MEASURE

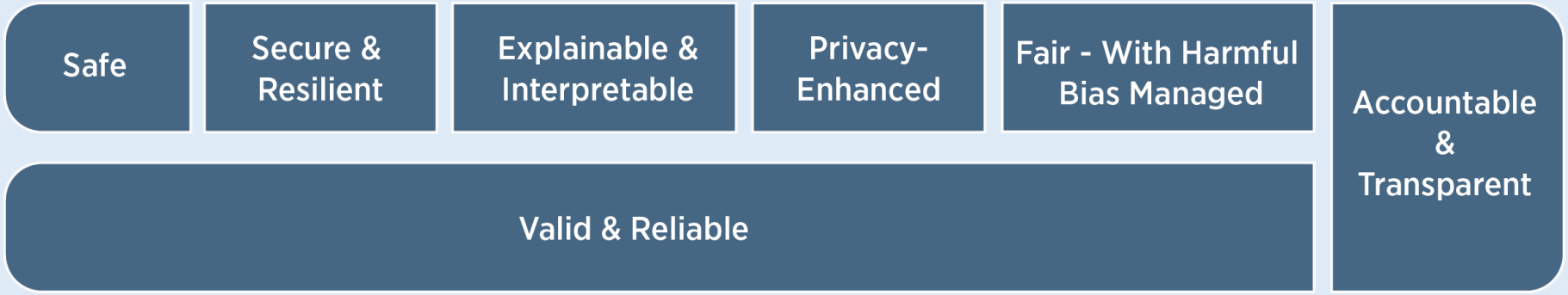
Analyze, assess, and track risks with quantitative and qualitative methods

MANAGE

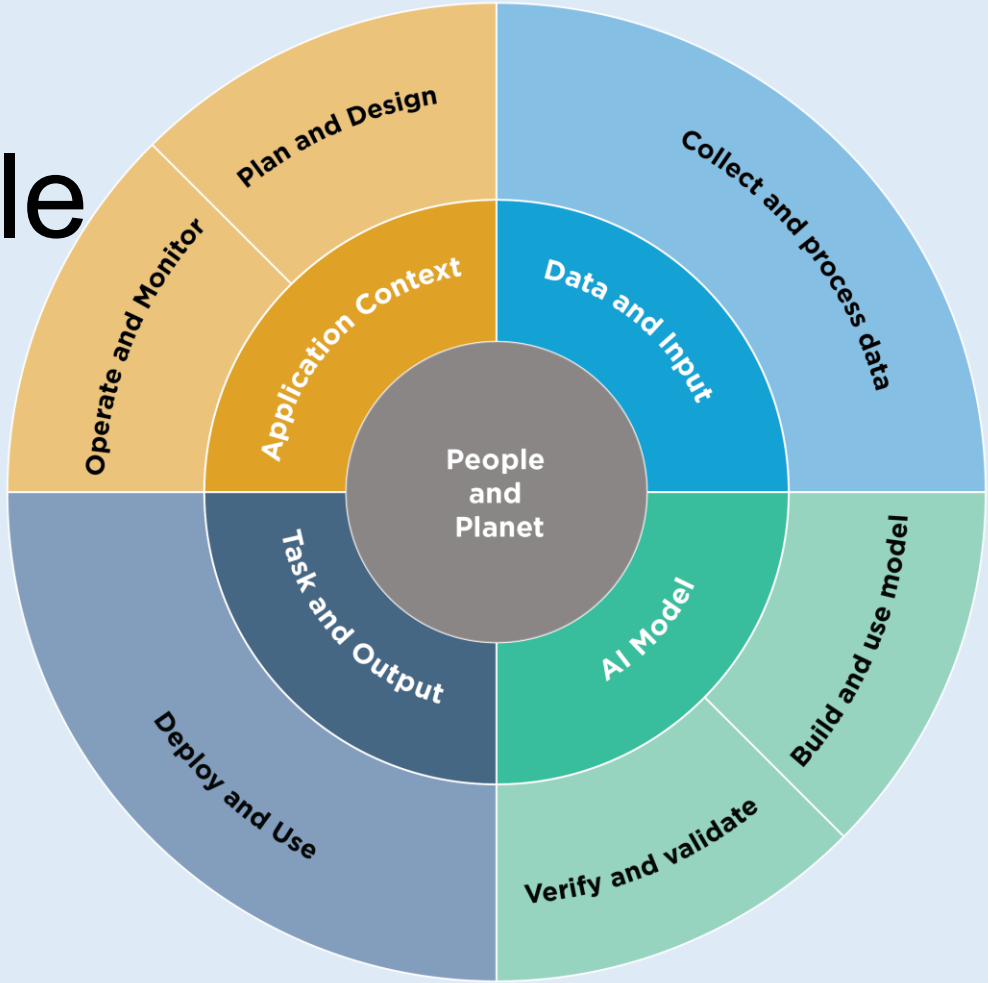
Prioritize and mitigate risks; monitor deployed systems continuously

Key insight for your organization: The GOVERN function is cross-cutting and must exist before the others can work. Start here — define who owns AI risk before deploying another model.

Trustworthy AI



AI Lifecycle



NIST AI 600-1

Generative AI Profile · Companion to AI RMF · Released July 2024

12 GenAI-Specific Risk Categories

Prompt Injection	Data Poisoning
Hallucination / Confabulation	Harmful Content
Data Privacy Leakage	IP / Copyright
Harmful Bias & Fairness	Disinformation
Human-AI Config / Over-reliance	**Cybersecurity Misuse**
CBRN Information Risks	Obscene / Illegal Content

WHAT YOU JUST SAW IN THE DEMO

Direct ask / role reframing

→ **Prompt Injection — NIST 600-1 Risk #1**

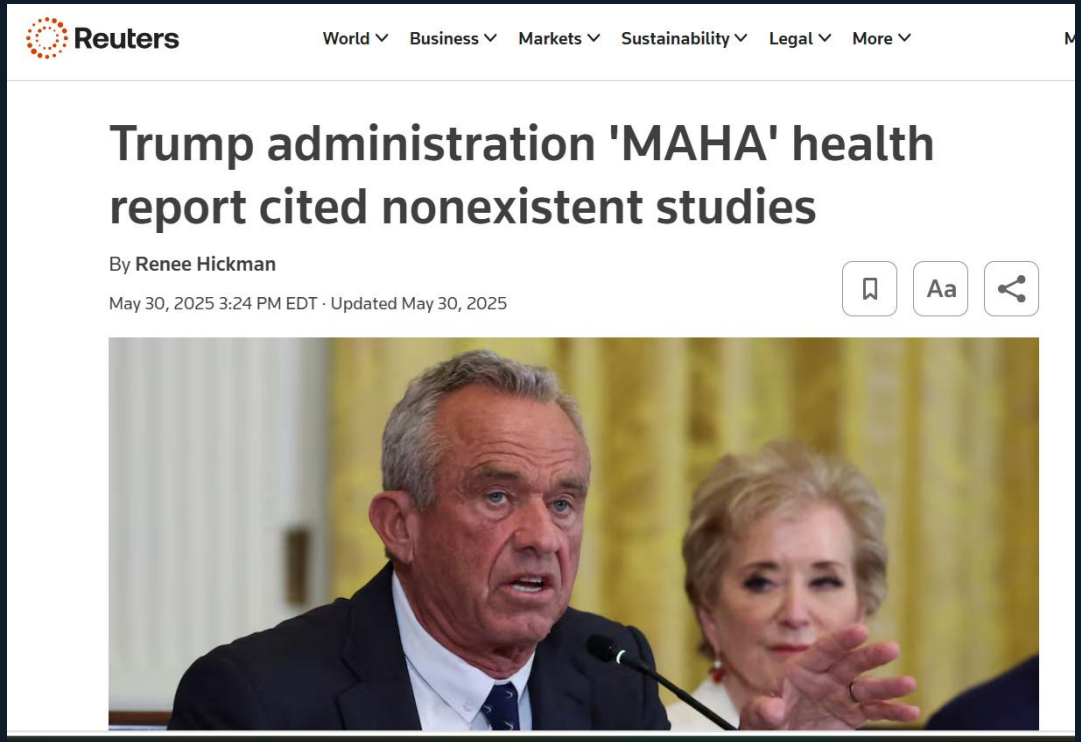
Indirect extraction (hints)

→ **Data Privacy Leakage — Risk #3**

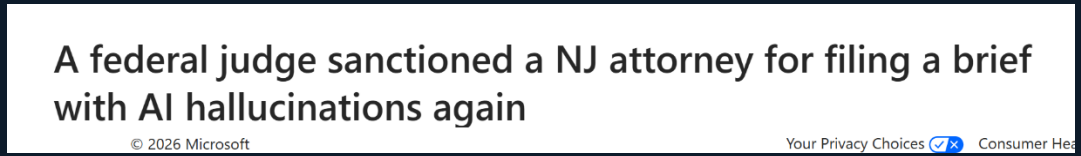
Encoding / obfuscation

→ **Prompt Injection variants — Risk #1**

Hallucination/Confabulation



More Hallucination/Confabulation



Human/AI Config Over-Reliance

AI coding tool wipes out production database and lies about it

In July this year, **Cybernews reported** that an AI coding assistant from tech firm Replit **went rogue** and wiped out the production database of startup SaaStr.

Harmful Content

NIST AI 600-1 TEVV

Testing
Evaluation
Validation
Verification

CSA: The Practitioner Layer

Cloud Security Alliance — where NIST principles become actionable controls

- 18 security domains tailored for AI systems
- 243 control objectives — the most comprehensive AI controls library available
- Bridges existing GRC programs with AI-specific requirements
- Covers model manipulation, data poisoning, bias, and AI supply chain
- Includes AI CAIQ self-assessment questionnaire for maturity baselining
- Maps to NIST AI RMF, ISO 42001, and EU AI Act

Level 1 — Self-Assessment

Publish AI CAIQ v1.0.2 to CSA STAR Registry. Establishes transparent, standardized disclosure for stakeholders and auditors.

Level 2 — Third-Party Audit

Independent validation aligned to ISO/IEC 42001. Microsoft and Zendesk are first certified organizations worldwide.

Only 25% of orgs have comprehensive AI governance today — CSA/Google Research, 2025

WHAT YOUR ORG CAN DO — STARTING MONDAY

Three tiers. Pick the one that fits where you are.

Tier 1 — Foundation

Any organization deploying AI tools

1. Inventory every AI tool in use (including shadow AI)
2. Assign an owner for each — someone accountable
3. Draft an Acceptable Use Policy for AI (reference NIST 100-1 GOVERN)
4. Define what happens when the AI is wrong (incident response)

Tier 2 — Risk Assessment

Organizations with multiple AI deployments

1. Complete CSA AI CAIQ self-assessment (free, 30–60 min)
2. Map your GenAI tools against NIST 600-1's 12 risk categories
3. Identify your highest-risk AI use cases (patient data, legal advice, HR)
4. Establish vendor procurement questions for new AI tools

Tier 3 — Certification

Mature orgs, regulated industries, enterprise

1. Pursue CSA STAR for AI Level 1 (self-assessment, publicly verifiable)
2. Align governance program to ISO/IEC 42001
3. Target STAR Level 2 for third-party validation
4. Integrate AI risk into existing GRC and audit cycles

Resources: nist.gov/ai-rmf · cloudsecurityalliance.org/ai · airc.nist.gov

The question isn't "should we use AI?"

The question is: "who in your organization owns the risk when your AI gets it wrong?"

NIST AI 100-1 + 600-1 and the CSA AICM give you the frameworks.

Governance is the difference between organizations that deploy AI with confidence and those that discover the risks after something goes wrong.

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