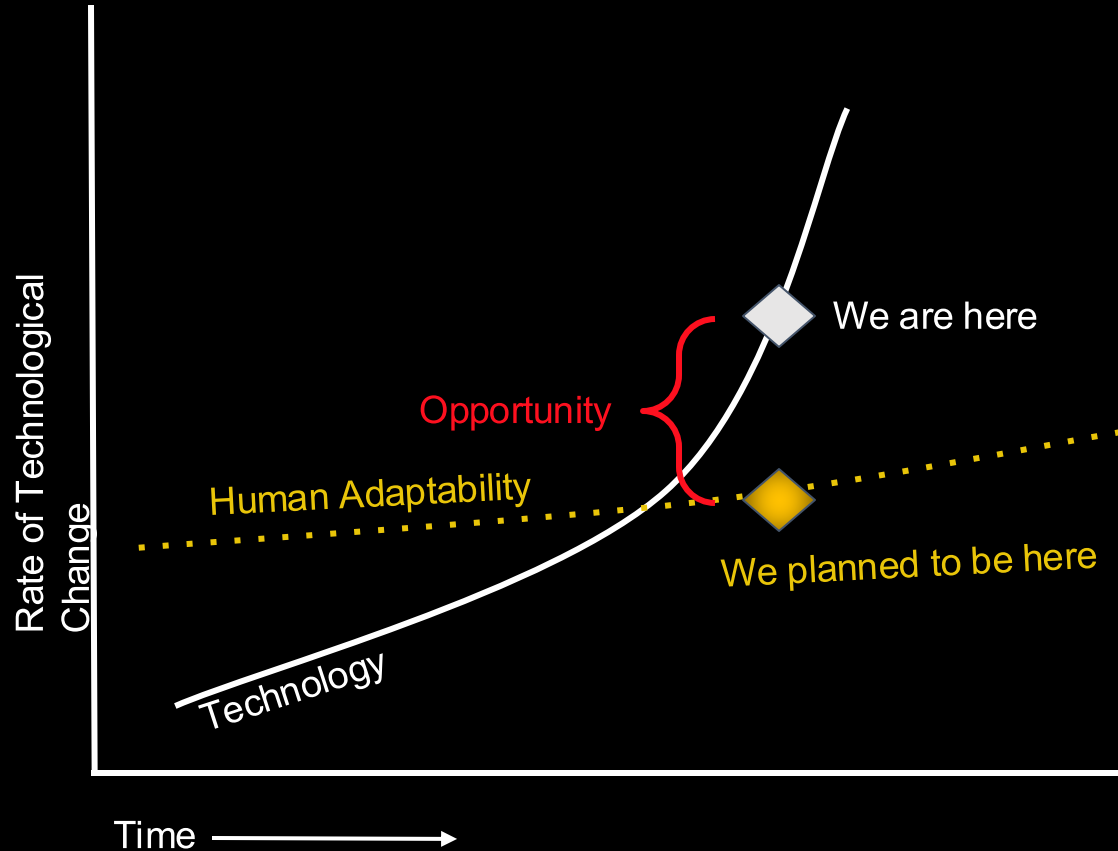




Future Proof Your AI Investment

EOQY LIFE
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Exponential Technology vs Human Adaptability



“There are two ways to adopt exponential technology:

too early or too late”

reliable

attribution

traceability

provenance

governance

credibility

trust

trustworthy

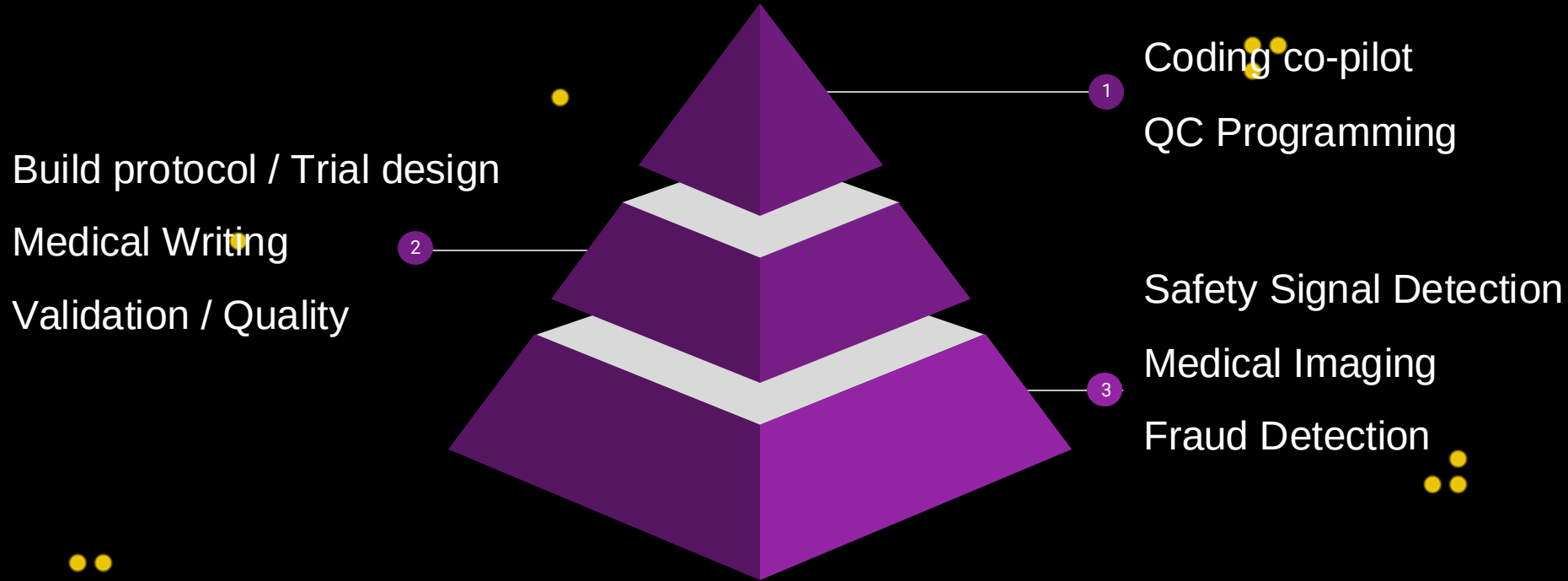
explainable

lineage

control

transparent

“While AI technology holds the **potential to improve** many if not all aspects of the medicinal product lifecycle, **trustworthiness** for regulators, payers and patients alike must not be compromised by the introduction of new technology.”



So, what's the problem?

- New Skills
- Prompt Engineering
- You simply MUST use it!

A red, multi-pointed starburst graphic with a black outline, containing the text "Are these really problems?".

Are these really
problems?

-
- Trust
 - Transparency
 - Credibility
 - Explainability

A green, multi-pointed starburst graphic with a black outline, containing the text "These are current and future problems!".

These are current and
future problems!

Why trust matters

50%

Improvement in adoption and user
acceptance (Gartner 2024)

Why trust matters

82%

C-Suite executives believe secure and trustworthy AI is essential to the success of their business

54% believe a lack of AI governance and risk management solutions is one of their biggest barriers to entry

23%

According to a [2024 Deloitte report](#), only 23% of organizations rated themselves as highly prepared to face challenges to risk management and governance brought about by AI, with risk, regulation and governance issues being three of the top four hindrances to development and deployment.

90%

of executives believe
cryptographic proofs enhance AI
trustworthiness

3 Pillars of trust



Lineage

Compliance

Attribution

Lineage

Forms verifiable interoperability across existing workflows, providing unparalleled lineage, process traceability and the unification and proof of governance.

→ Definition: Digital fingerprints providing mathematical proof of data integrity. Real-time automated documentation: Who, what, where, when, when and how. Pair with human attestations for context: Why

→ Benefits: Immutable records. Reliability without accessing sensitive or prohibited data or code. Supports end-to-end data lineage, traceability and context for human-decisions

→ Outcome: Builds trust in data reliability for regulators

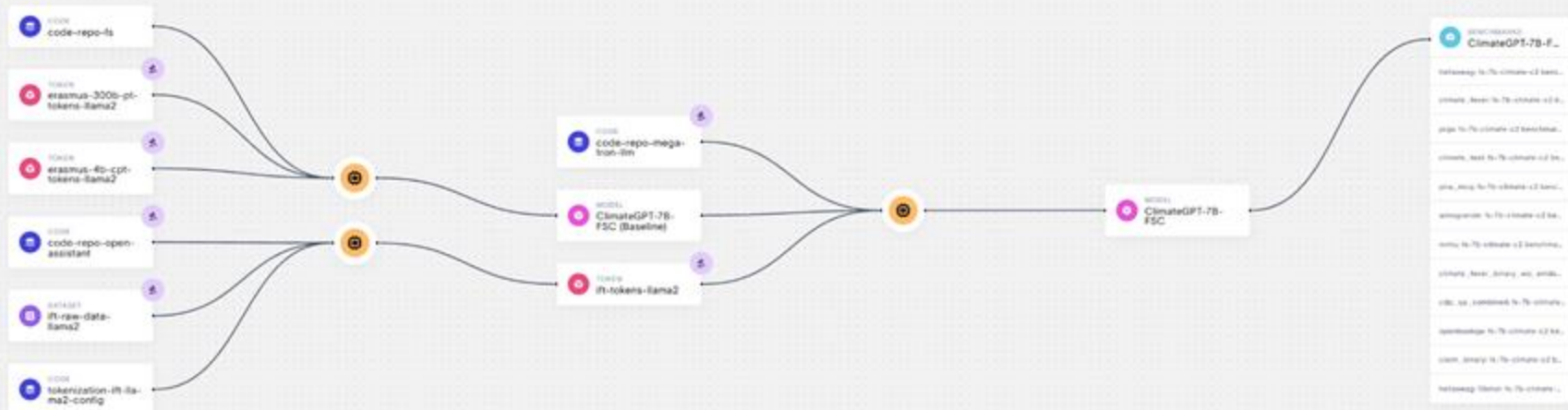
AI Lineage Explorer

🔍 Search Hugging Face 🤖 or Type a URL 🌐

Upload a Manifest

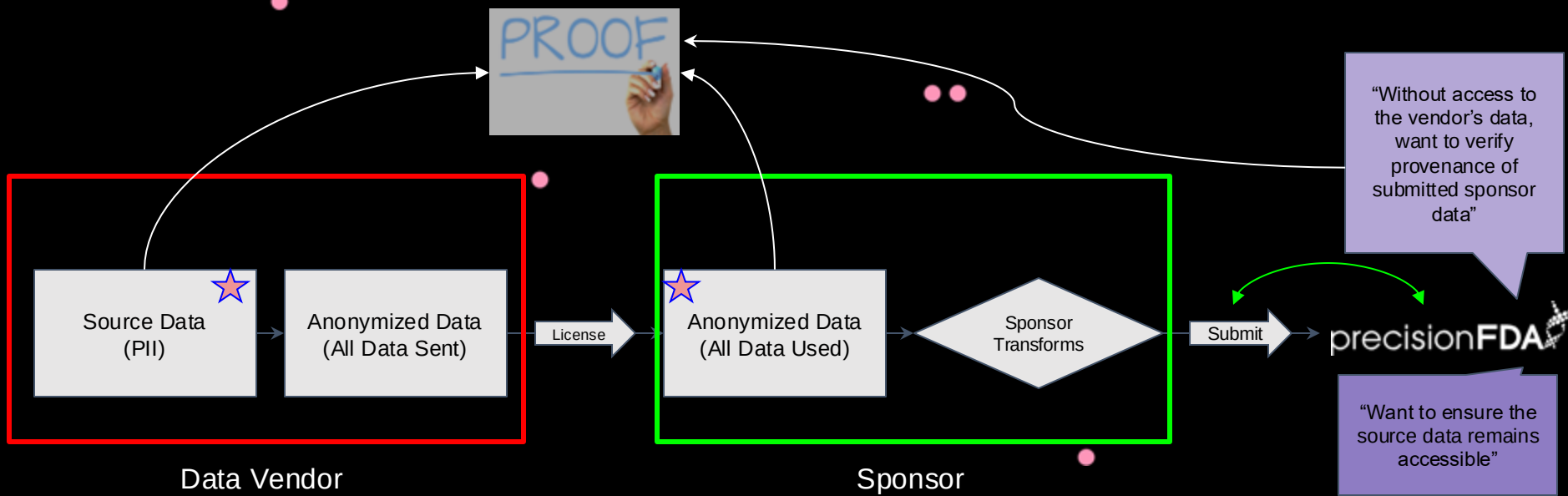
Explore More...

eci-io/ClimateGPT-7B-fsc



Verified Certificate View | [Share Graph](#)

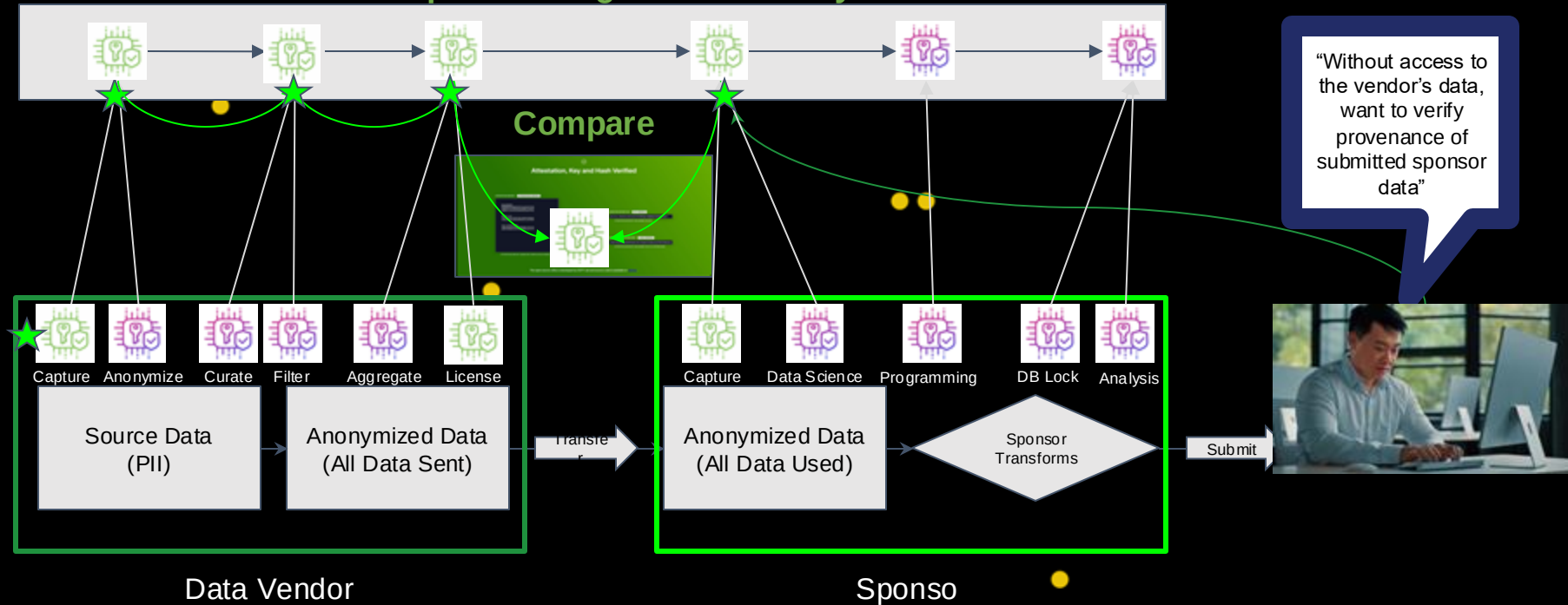
Data Reliability Challenges



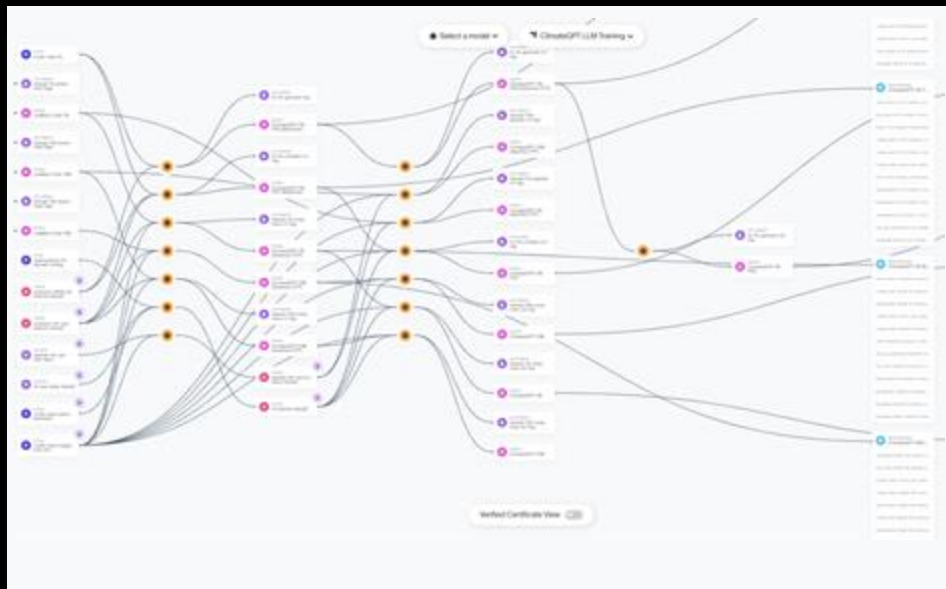
Modern RWE Audit Solution

- Cryptographic certifications are unique derivative datasets of data and metadata that are tamper-proof
- Any code, file, system, or application becomes a source of truth, and these certificates are independently portable and auditable
- A verified data layer forms interoperability, enabling unified governance for system driven documentation of process adherence
- Auditors granted access to data and process lineage as well as the controls that were in place and whether they were followed.

Complete Lineage & Traceability



Without revealing underlying data, prove data provenance, encryption, governance and processes



Integrity Across Multiple Systems

Interoperable, verifiable lineage and governance across disparate systems and multiple organizations

- Complete verifiable lineage to source
- Drill-down to data-point level
- Clickable URL into data
- Process transparency and versioning
- Visualize privacy and governance

Compliance

Standards to make one trustworthy

1. **Government legislation**, such as the EU AI Act
2. **Risk management frameworks**, such as Databricks AI Security Framework
3. **Responsible AI frameworks**, such as the Responsible Artificial Intelligence Institute's Framework
4. **Internal Policies**, Standard Operating Procedures (SOPs) that align with or combine standards 1-3 to streamline processes and minimize compliance risks

55

pages of content

500+

Controls for high
risk systems

Original EU AI Act control: “Training, validation and testing data sets shall be relevant, sufficiently representative, and to the best extent possible, free of errors and complete in view of the intended purpose.”

1 >>>> 12

“Providers of high-risk AI systems must contain training data sets that are sufficiently representative.”

...

Shift your compliance left

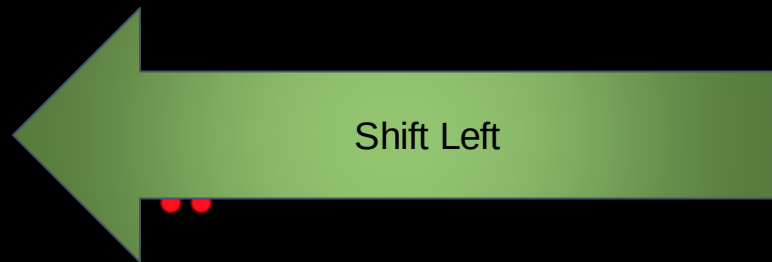
“I have read and understood this SOP”

“I can prove that I implemented the requirements of this SOP”

Weave compliance into your process, do it earlier and prove unequivocally that you acted per the SOP.

Shift your compliance left

- Governance Controls
- Manual Attestations
- Code level Attestations
- Agent Automation
- Proactive Management



Proof | Trust | Confidence | Efficiency

Multi-System Governance

Automated documentation of process adherence for proven controls and full traceability.

Risk Controls

Control ID	Risk	Implementations	Controls Category	Severity
IGG-3.9	Ensure CloudWatch Logs Are Configured For All Services And Log Streams	Configure AWS CloudWatch To Collect Logs From All Services And Log Streams To Ensure Comprehensive Visibility Across AWS Environments.	Monitoring	High
IGG-3.8	Ensure That The Retention Period For CloudTrail Logs Is Appropriately Configured	Set A Suitable Retention Period For CloudTrail Logs To Ensure Historical Data Is Available For Audit Purposes While Managing Cost And Data Relevance.	Logging	Medium
IGG-3.1	Enable CloudTrail In All Regions	Ensure That AWS CloudTrail Is Enabled In All AWS Regions To Capture Every API Call And Console Action Performed In The Account.	Logging	High
IGG-3.2	Enable CloudTrail Log File Validation	Activate Log File Validation For CloudTrail To Ensure The Integrity And Authenticity Of Log Files.	Logging	Medium
IGG-3.3	Encrypt CloudTrail Logs Using KMS CMKs	Use AWS KMS Customer Master Keys (CMKs) To Encrypt CloudTrail Logs To Protect Sensitive Data At Rest.	Logging	High
IGG-3.4	Monitor Unauthorized API Calls	Create And Configure Metric Filters And Alarms To Monitor And Alert On Unauthorized API Calls, Which May Indicate A Security Incident Or Misconfiguration.	Security Monitoring	High
IGG-3.5	Ensure CloudTrail Logs Are Encrypted At Rest Using KMS CMKs	Encrypt CloudTrail Logs Using AWS KMS Customer Master Keys (CMKs) To Protect Sensitive Data At Rest.	Logging	High
IGG-3.6				
IGG-3.7				



➔ Digitalize SOPs across the workflow that integrate and synchronize automatically with existing systems.

➔ Create unified control across multiple systems, integrate with human processes and third-party data catalogs.

➔ Ensure compliance, and identify inefficiencies in data management and third-party access controls.

➔ Transparent review process that accelerates trial design, trial execution, and regulatory review cycles while reducing risks associated with RWD.

What about other governance controls?

→ Infrastructure Controls

- ◆ Databricks AI Security Framework
- ◆ NIST
- ◆ AWS / Azure / GCP

→ Digitalized SOPs

- ◆ DB Lock
- ◆ Double Programming

→ Process Controls

- ◆ RWE

Attribution and ROI

Attribution and ROI

- AI implementation requires significant resources
- Measuring ROI is essential
- Cryptographic certificates automate measurement of contributions
- Enables fair compensation based on quality and value
- Data vendors compensated regardless of reliability
- Encouraging provision of more reliable data
- Sharing profitability with data providers and vendors
- Leads to better data quality and model performance



Future-Proofing AI Investments

- Compliance:
 - Utilization of frameworks during development and deployment
 - Ensuring ethical and secure AI operation
- Explainability:
 - Human-in-the-loop capabilities for contextual decisions
 - Reproducible data and process lineage
 - Verified proof of governance controls
- Attribution:
 - Measuring value contributed by data and models
 - Enabling fair compensation and ROI assessment



Cryptography is key to achieving trustworthy AI

- Enables compliance, explainability, and attribution
- Essential for innovating responsibly
- Prepares organizations for a future where AI is trusted and transformative
- Don't just adhere to a law, guideline or SOP; Embed them in your process with automation.
- Give reviewers confidence in your submissions
- Reward positive behaviour through appropriate attribution





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