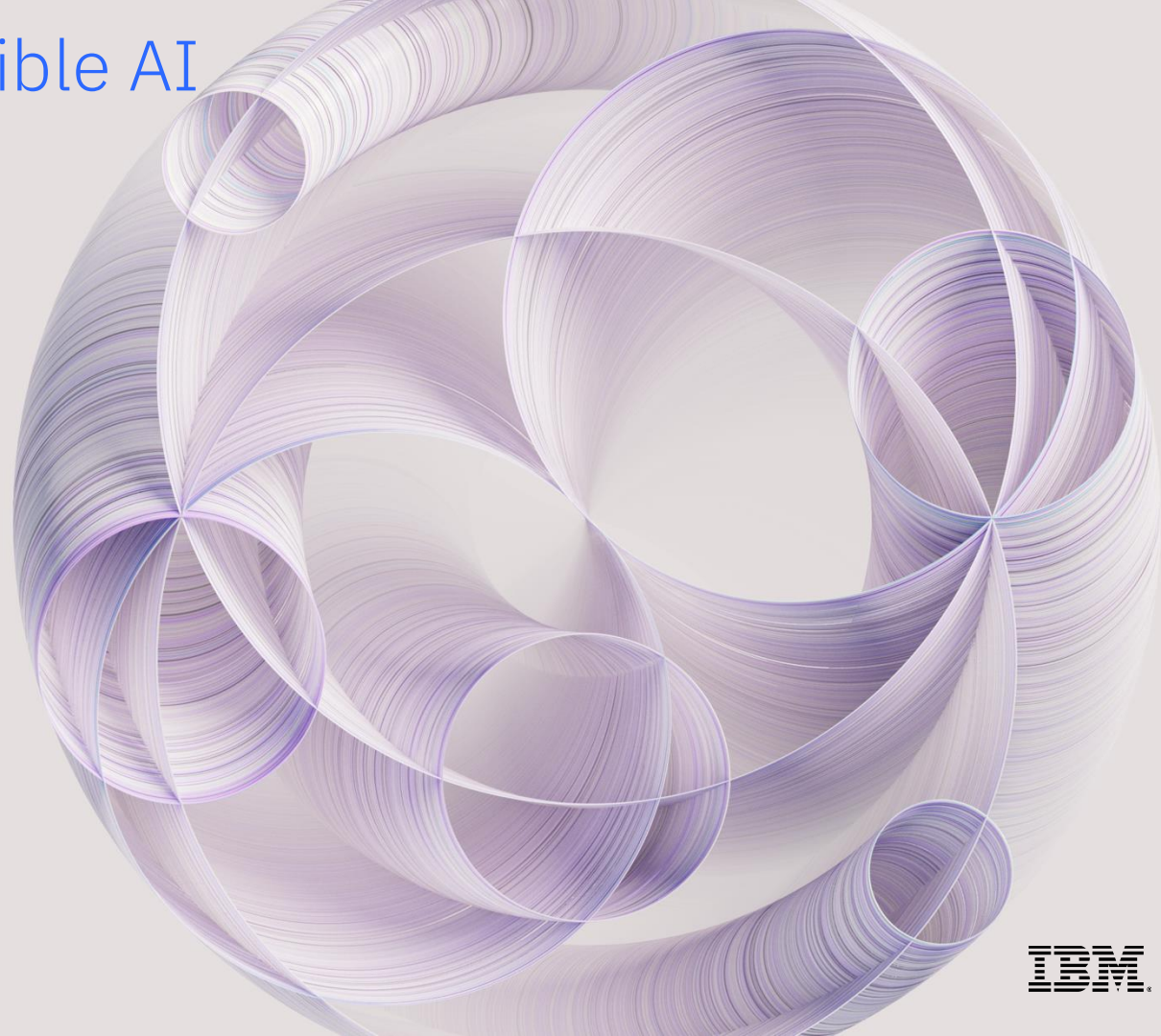


Accelerate Responsible AI with End to End AI Governance

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IBM Worldwide Data and AI Team
November 2024



Why AI Governance now?

AI is becoming widely adopted but....

BlackRock shelves **unexplainable AI** liquidity models

Risk USA: Neural nets beat other models in tests, but results could not be explained

Cigna Sued Over Algorithm Allegedly Used To Deny Coverage To Hundreds Of Thousands Of Patients

the study from earlier this year claimed the **higher audit rate for Black taxpayers** is due to a flawed artificial intelligence algorithm relied on by the IRS to decide who gets audited.

Apple Card algorithm sparks **gender bias** allegations against Goldman Sachs

RETAIL OCTOBER 10, 2018 / 4:04 PM / UPDATED 2 YEARS AGO

Amazon scraps secret AI recruiting tool that showed **bias against women**

YouTube sued for using AI to **racially profile** content creators

They claim YouTube's algorithms discriminate against black users

/ Users have been reporting all sorts of **'unhinged' behavior** from Microsoft's **AI chatbot**. In one conversation with The Verge, Bing

The Washington Post
Democracy Dies in Darkness

Get 1 year for \$29

Over-**Segmenting** In Financial Services Is So Over - Bye, Bye

Google AI chatbot threatens student asking for homework help, saying:

AI needs governance –
the process of directing,
monitoring and managing the
AI activities of an organization

Operationalizing AI governance requires a strategic approach

Common challenges

Manual work can lead to costly errors, drawn out model lifecycles and lead to employee burnout

Overhead and missed opportunities resulting from **multiple, disparate, tools and interfaces not optimized for AI**

Governing AI is not a **one-size-fits-all approach**, need to govern across hybrid AI

AI is becoming a team sport with many stakeholders, **lack of tools for collaboration and communication** can draw out model deployment and

Getting to an ideal state

Automate AI governance activities to streamline processes

Enhance suboptimal tooling, automate and consolidate

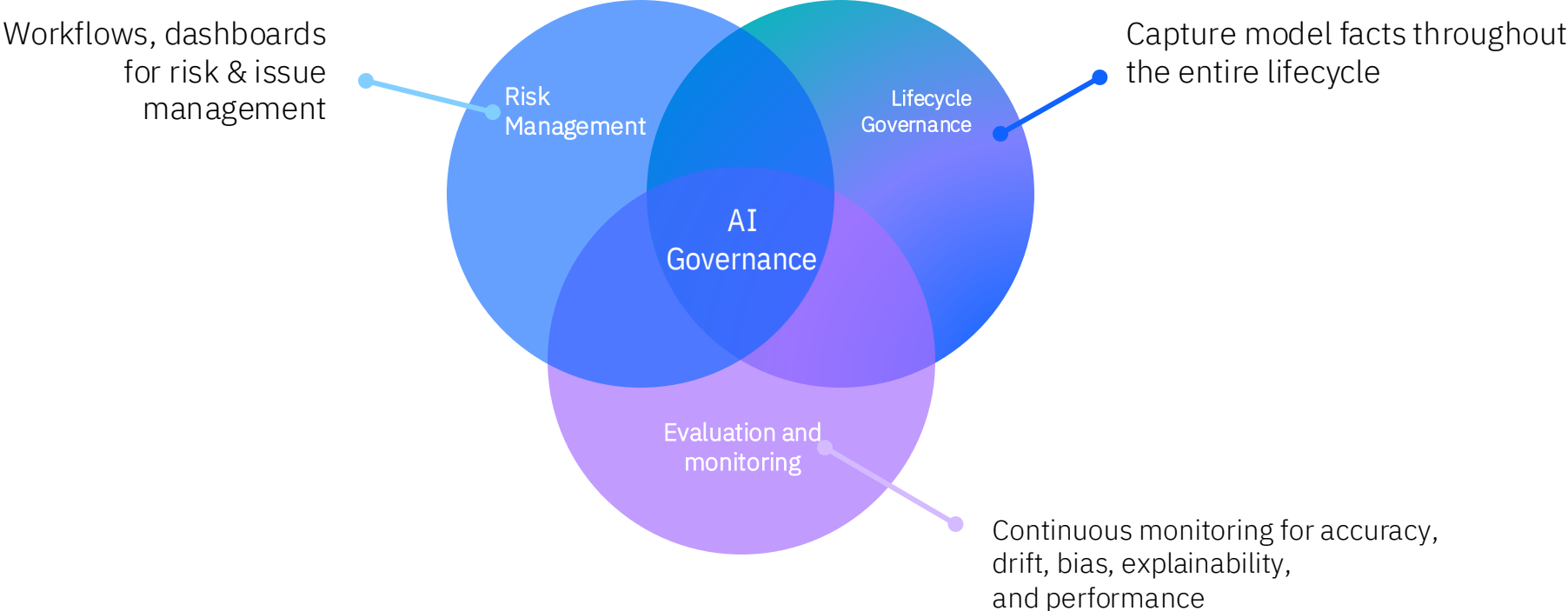
Use a single set of governance policies and workflows across platforms and applications

Drive visibility across the organization with automated collaborative tools, customizable dashboards and reports

IBM watsonx.governance

A toolkit to help accelerate responsible, transparent and explainable data and AI workflows

3 Core Pillars

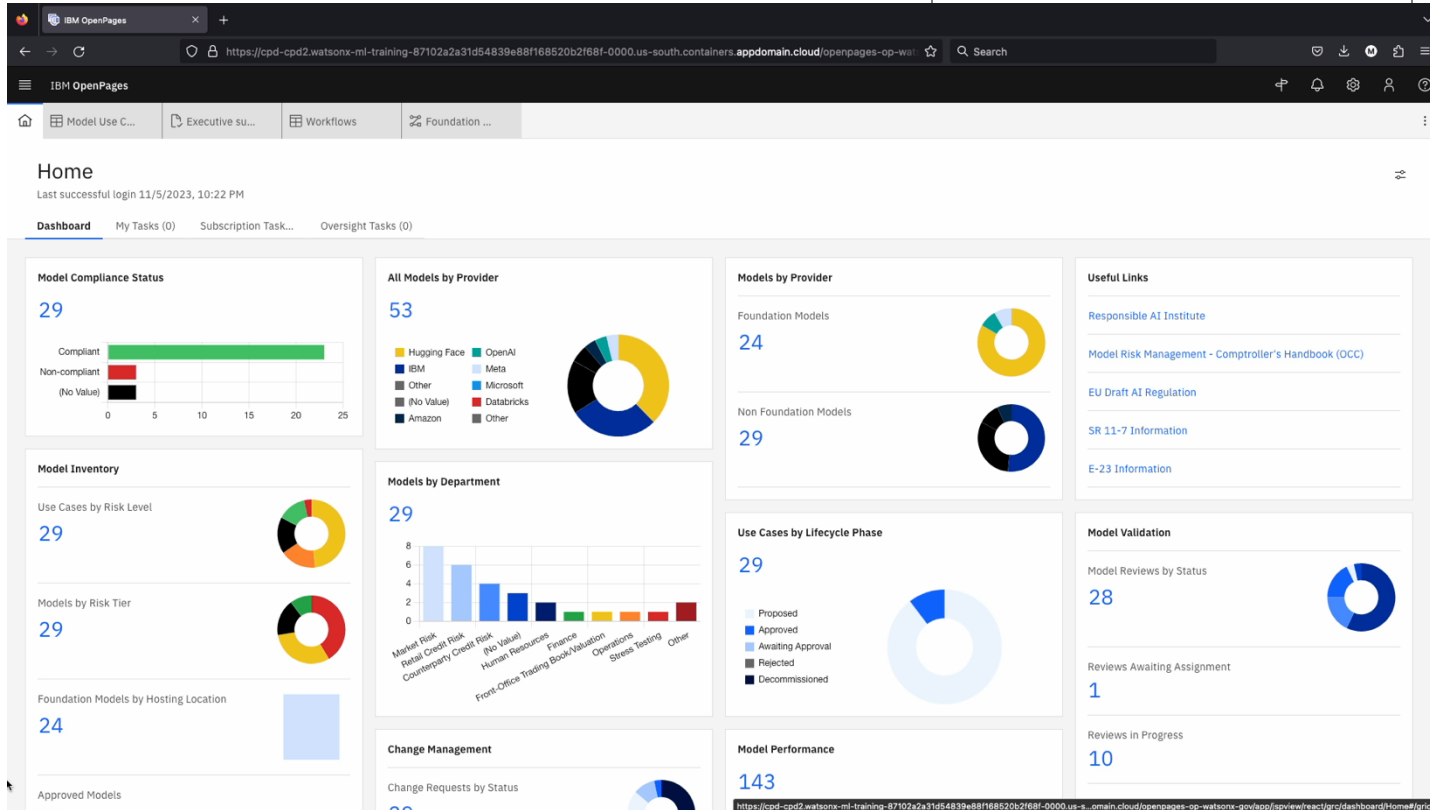


Risk Management

What is it?

Single glass pane view of the enterprise's model risk landscape.

Manage and automate the activities around attestation, review, validation, change management and issue resolution of AI models



Why is it important?

Meet the compliance requirements of model-focused regulations across regions and jurisdictions.

Reduce governance costs.

Maintain clear roles and responsibilities.

Lifecycle Governance

What is it?

Tracking the lifecycle of models from cradle to grave.

View factsheets for model assets that track lineage events and facilitate efficient ModelOps governance.

AI use cases

Find a AI use case

New AI use case +

Filter	Name	Status	Owner	Inventory	Tags	Risk level	Alerts in
Status	Insurance Claim processing	AI asset rejected	MB MELANIE BRUNACHE	Default Inventory		High	1 dimension
<input type="checkbox"/> Draft	AI Model Case1	Draft	BR Bob RENO	AI Model Inventory		Medium	none
<input type="checkbox"/> Ai Asset Rejected	Job Application Screening	Draft	MB MELANIE BRUNACHE	Default Inventory		Medium	none
<input type="checkbox"/> Ready For Use Case Approval	Interest Rate Computation	Draft	MB MELANIE BRUNACHE	Default Inventory		Low	none
Owner	Customer Sentiment Classification	Ready for use case approval	MB MELANIE BRUNACHE	Default Inventory		Low	none
Inventory	Loan Approval	Draft	MB MELANIE BRUNACHE	Default Inventory		Medium	none
Tags							
Alerts in							
<input type="checkbox"/> Generative Ai Quality							

Why is it important?

Reduce manual efforts to document models.

Increase transparency of models.

Evaluation and Monitoring

What is it?

As data scientists are building their models, they can apply fairness and explainability techniques directly from within their Python notebook.

Why is it important?

Identify and mitigate data and model bias as early in the process as possible.

Explain complex models at a global level as well as a transactional level

Test results

Evaluation activity

Last evaluation activity
MELANIE BRUNACHE
November 27, 2023 at 12:21:31 PM

Evaluation data set
Insurance claim summarization test data.csv

Threshold alerts
11

Generative AI Quality

Readability 63.968



Input data HAP 0



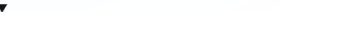
Jaccard similarity 0.559



ROUGE-LSum 0.671



Output data PII 0



Recall 0.577



ROUGE-2 0.628



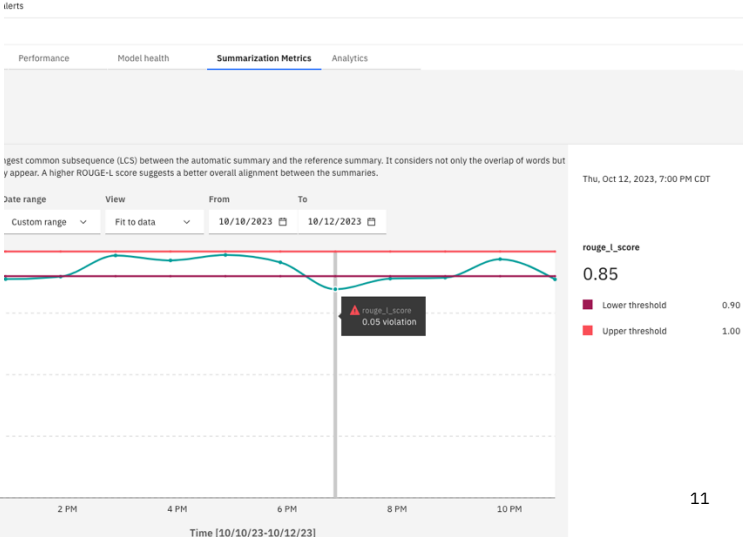
METEOR 0.583



Output data HAP 0



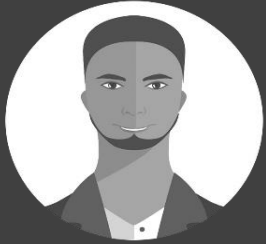
Precision 0.873



Who are the users?

AI Governance Roles

Chief Risk Officer,
Chief Data Officer
and other C-level
executives



Lead/Sponsor AIG
Initiatives

Risk management
team



Implement MRM
framework,
reporting

Data science team



Build, deploy,
remediate

MLOps and enterprise
engineering team



Validate, monitor

Learn more!

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IBM AI Risk Atlas



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Demo

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