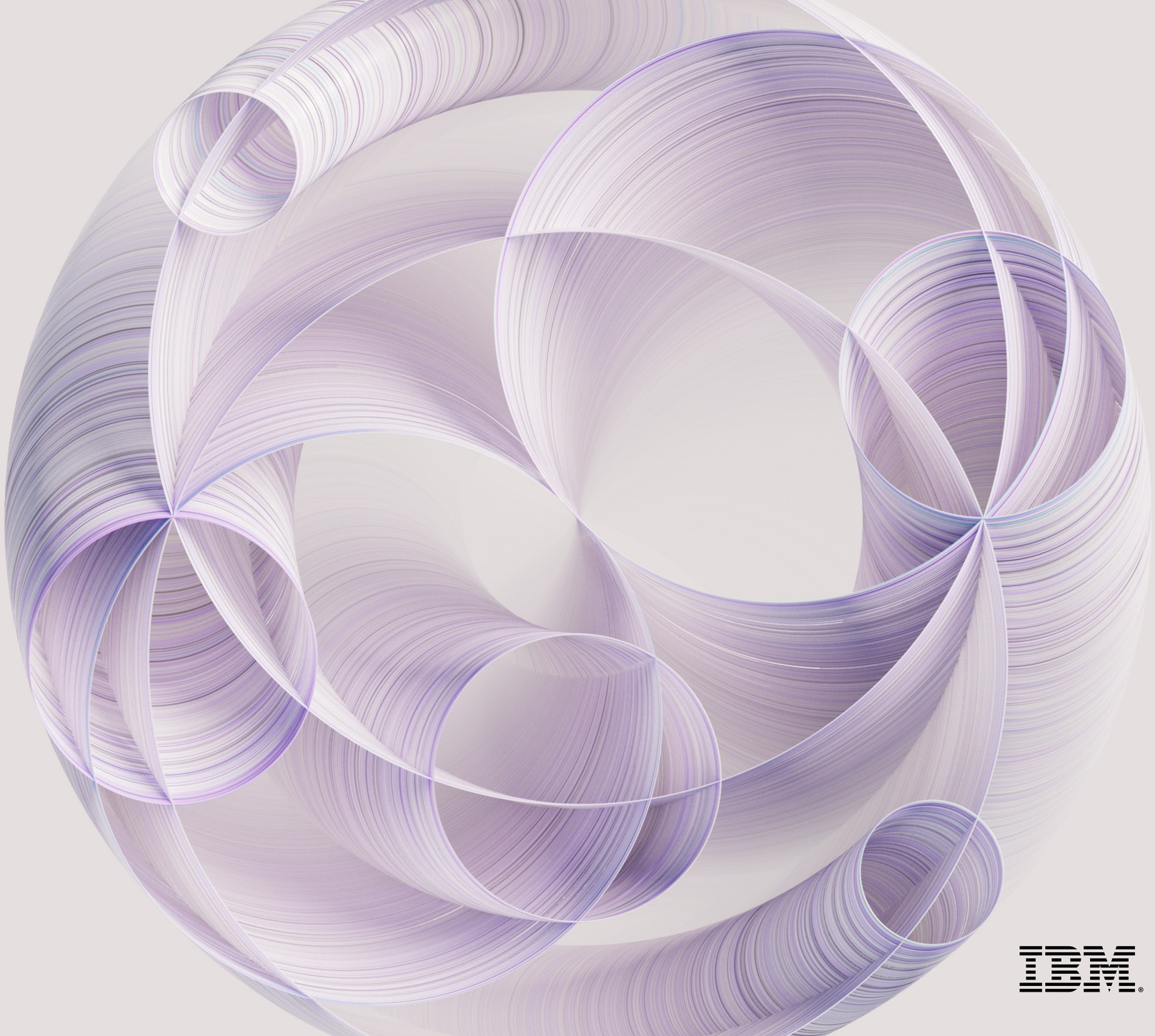
watsonx

Scale and accelerate the impact of AI with trusted data



A new era for AI

We are in one of those rare moments in history, when a new technology innovation arrives that radically transforms business and society.

Artificial intelligence is that technology today.

The majority of AI in production today is based on machine learning (ML). IBM has one of the most comprehensive portfolios to deploy ML in business.

Now, generative AI and foundation models are making massive AI scalability possible.

A foundation model is an AI model that trains on large amounts of general data, which can be adapted easily to new scenarios and use cases.

With each use, foundation models amortize the initial work of AI development.

By 2025, we expect foundation models to power a third of AI within enterprises.

Introducing...

watsonx

The platform for AI and data

watsonx

Scale and accelerate the impact of AI with trusted data.

watsonx.ai

Train, validate, tune and deploy AI models

A next generation enterprise studio for AI builders to train, validate, tune, and deploy both traditional machine learning and new generative AI capabilities powered by foundation models. It enables you to build AI applications in a fraction of the time with a fraction of the data.

watsonx.data

Scale AI workloads, for all your data, anywhere

Fit-for-purpose data store optimized for governed data and AI workloads, supported by querying, governance and open data formats to access and share data.

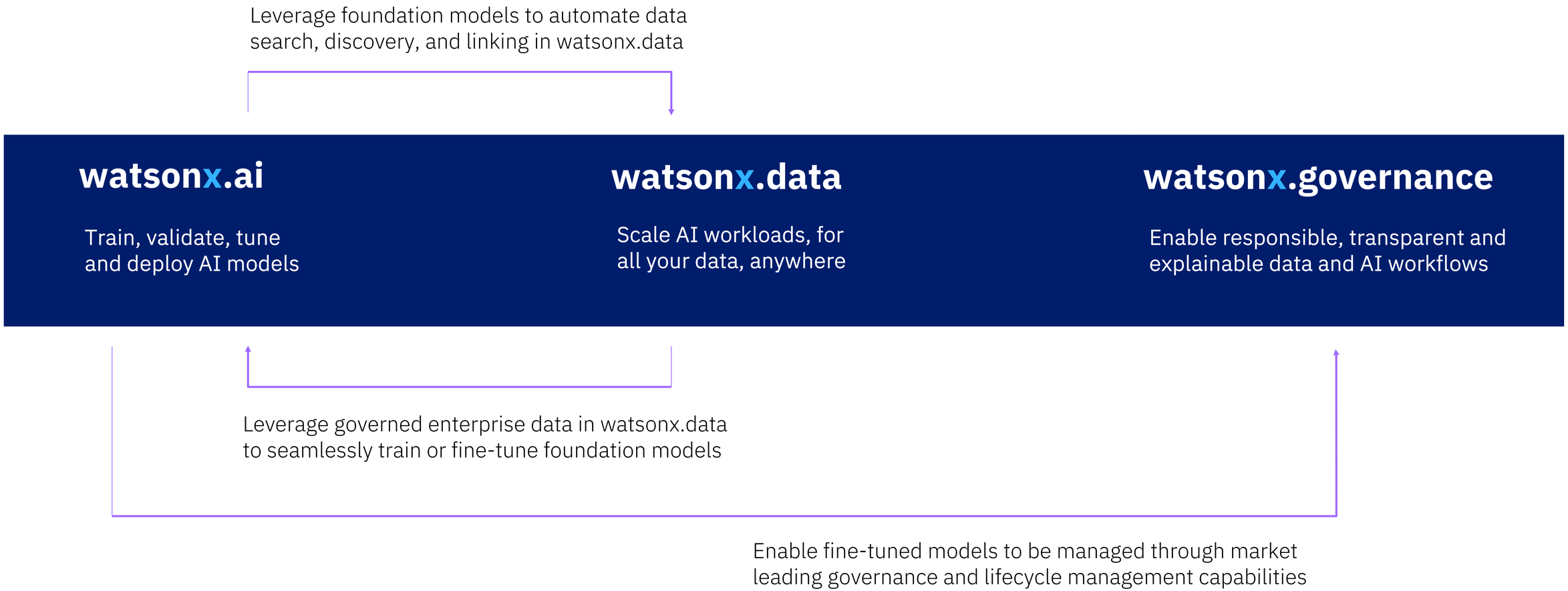
watsonx.governance

Enable responsible, transparent and explainable data and AI workflows

End-to-end toolkit encompassing both data and AI governance to enable responsible, transparent, and explainable AI workflows.

Put AI to work with **watsonx**

Scale and accelerate the impact of AI with trusted data.



watsonx.ai

Train, validate, tune and deploy AI models

A next generation enterprise studio for AI builders to train, validate, tune and deploy both traditional ML and new generative AI capabilities, powered by foundation models

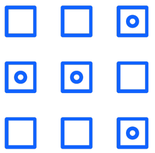
Leverage foundation models and generative AI with a fraction of the data, in less time leveraging advanced prompt-tuning capabilities, full SDK and API libraries.

Bring together AI builders using open-source frameworks and tools for code-based, automated, and visual data science capabilities – all in a secure, trusted studio environment.

Accelerate the full AI model lifecycle with all the tools and runtimes in one place to train, validate, tune and deploy AI models.

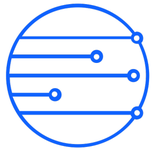
Leverage foundation models and generative AI

Build AI applications in a fraction of the time with a fraction of the data.



Foundation model Libraries: Easy access to IBM-proprietary and open-source Foundation Models

Prompt Lab: Experiment with zero/few-shot learning for enterprise tasks



Tuning Studio: Tailor pre-trained Foundation Models for complex downstream tasks on enterprise data

+ AI Builder API / SDK Toolkit
Workbench tooling and models can be used via GUI or APIs that integrate directly into enterprise applications

Use cases:

– Generate customized marketing emails

– Summarize Webex meeting transcripts

– Classify customer complaints without labeled data

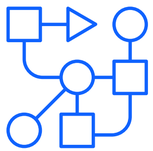
– Translate code from markdown to html

– Extract key facts from unstructured financial documents

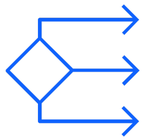
Bring together AI builders using open-source frameworks and tools

A studio for Machine Learning and foundation models to build faster models that brings disparate tools together.

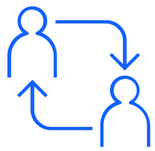
Build predictive and prescriptive models using open source or low/no-code data science tools to improve decision-making.



ModelOps



Automated Development



Team Collaboration

Decision Optimization

Use cases:

– AI based predictions and recommendations

– Pattern and anomaly detection

– Real world business applications e.g., hyper-personalization, production or price optimization, product classification, 10-K classification, SEC, etc.

Accelerate the full AI model lifecycle with all the tools and runtimes in one place

End-to-end orchestration of ML and foundation model workflows in a consistent, repeatable, and automated way.

Automatically analyze tabular data and generate candidate model pipelines customized for a predictive modeling problem.

Unify processes, tools and talent to drive faster return on investment.

Gain efficiency in:

- Data science, ML and AI benefits ranging from $1.2 million to $3.4 million in cost savings.
- Container management efficiencies ranging from $12.5 million to $14.4 million.

Source: Forrester's Total Economic Impact on Cloud Pak for Data

watsonx.data

Scale AI workloads, for all your data, anywhere

A fit-for-purpose data store, based on an open lakehouse architecture, for governed data and AI workloads

Access all your data through a single point of entry across all clouds and on-prem environments.

Get started in minutes with built-in governance, security and automation.

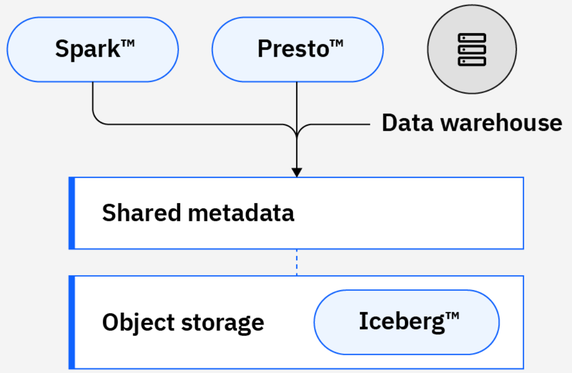
Reduce the cost of your data warehouse by up to 50%* through workload optimization across multiple query engines and storage tiers.

*When comparing published 2023 list prices normalized for VPC hours of IBM watsonx.data to several major cloud data warehouse vendors. Savings may vary depending on configurations, workloads and vendors.

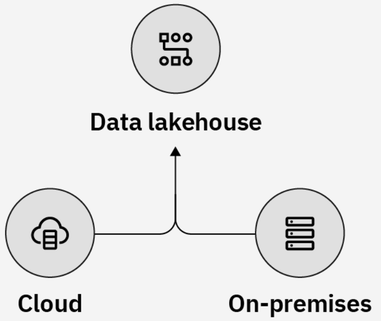
Access all your data across hybrid-cloud through a single point of entry

An open data store built for hybrid deployment of your analytics and AI workloads

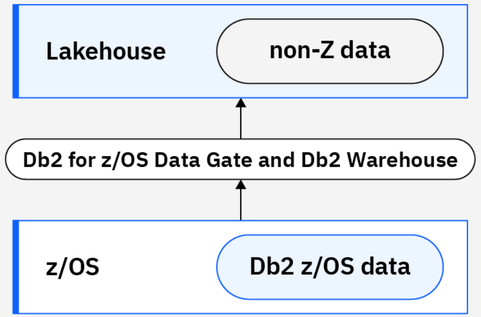
1 Share a single copy of data with tools that can read open data formats to minimize data duplication



2 Connect to and access data remotely across hybrid-cloud with the ability to cache remote sources



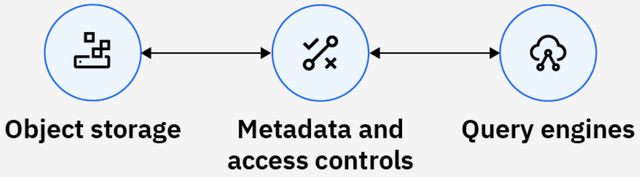
3 Synchronize and incorporate Db2 for z/OS data for lakehouse analytics.



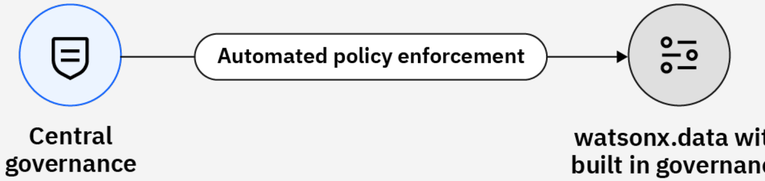
Get started in minutes with built-in governance, security and automation.

Accelerate time to trusted analytics and AI

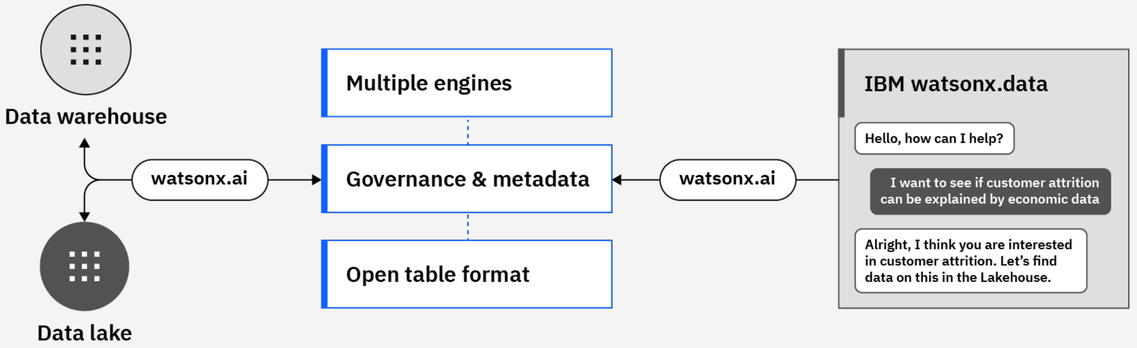
Connect to your existing analytics data and deploy fit-for-purpose engines in minutes



Address enterprise compliance and security using built-in centralized governance across your data ecosystem



Use foundation models to discover, augment, refine, and visualize watsonx.data data and metadata

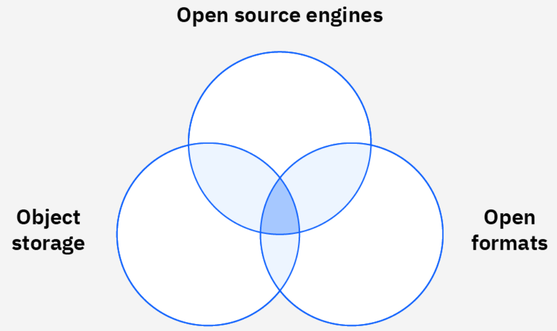


Reduce your data warehouse costs by up to 50%* by optimizing workloads

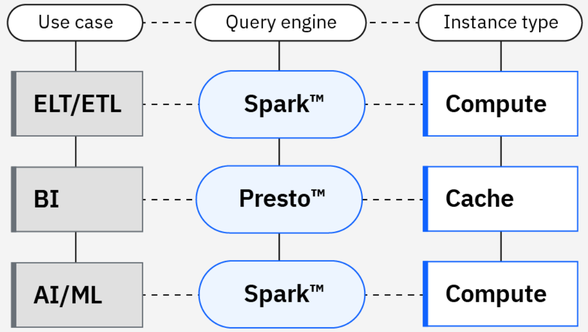
Optimize workloads from your data warehouse when you take advantage of low-cost object storage and fit-for-purpose query engines

*When comparing published 2023 list prices normalized for VPC hours of IBM watsonx.data to several major cloud data warehouse vendors. Savings may vary depending on configurations, workloads and vendors.

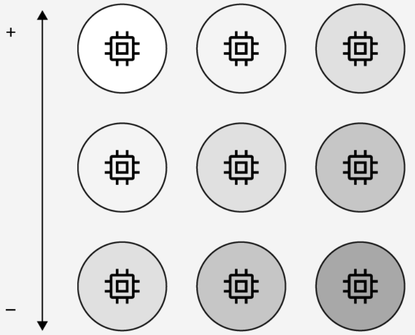
1 Share data between multiple analytics engines



2 Use fit-for-purpose compute and cache-optimized instances



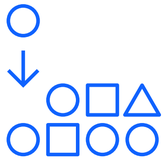
3 Scale up and scale down automatically



watsonx.governance

Enable responsible, transparent and explainable data and AI workflows

An end-to-end toolkit encompassing both data and AI governance



Govern across the entire AI lifecycle by automating and consolidating multiple tools, applications and platforms while documenting the origin of data sets, models meta data and pipelines.

Manage risk and protect reputation by automating workflows to better detect fairness, bias and drift.

Adhere to regulatory compliance by translating growing regulations into enforceable policies.

Govern across the entire AI lifecycle

Operationalize AI using automated GRC tools for scalability, transparent processes and explainable model outcomes.

Automate AI governance activities

Integrate and augment your existing ML development and deployment with governance

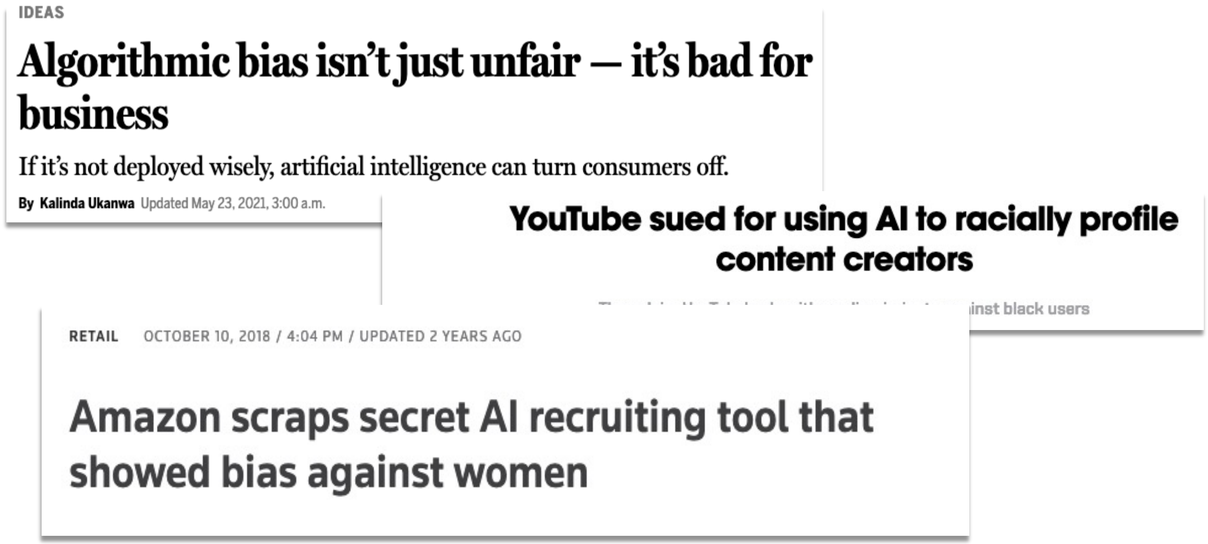
– Increase scalability by replacing time consuming, disparate, manual tools with an automated GRC toolkit spanning the AI lifecycle

– Support the governance of models built and deployed using 3rd party tools.

– Automate metadata/lineage capture through Python notebooks

Manage risk and protect reputation by automating workflows to better detect fairness, bias and drift

Ensure that AI models are behaving with fairness, accuracy and providing ethical outcomes to avoid loss of reputation, audits or fines.



– Proactively detect and mitigate model bias and drift in runtime using automated GRC tools that trace and document the techniques that trained each model, the hyperparameters used, and the metrics from testing phases

– Decrease the time to model deployment using automated collaborative tools to shorten approval times and eliminate costly human errors

– Provide visibility into metrics and data to help data scientist to further trouble shoot issues and to provide explainable AI insights for stakeholders, stockholders and customers

Adhere to regulatory compliance by translating growing regulations into enforceable policies

Automate the translation of AI regulations into enforceable standards and policies for audit and compliance.

Sarbanes–Oxley Act

– Automate monitoring bias and drift to avoid costly fines and audits associated with noncompliance due to errors involved with manual processes and spreadsheets.

– Provides a single repository of obligation management, that can classify complex regulations and enable stakeholders across the enterprise to more efficiently process large volumes of regulatory data.

– Uses dynamic dashboards and collaborative tools to report on performance metrics to ensure management’s need to be informed on compliance to regulations

watsonx

Built on Red Hat OpenShift.
It runs anywhere.

With **watsonx**, clients and partners can create unique business value.

Competitive differentiation and unique business value will be increasingly derived from how customized an AI model can be to an enterprise's unique data and domain knowledge.

With **watsonx**, clients have access to the toolset, technology, infrastructure, and consulting expertise to build their own or fine-tune and customize available AI models and deploy them at scale for business success.

An AI and data platform, on hybrid cloud

AI and data platform

watsonx

watsonx.ai
watsonx.data
watsonx.governance

Cloud Paks

Hybrid cloud platform

Red Hat

OpenShift
Enterprise Linux
Ansible Automation Platform

Unleash the intelligence in your business

AI products	Digital Labor	IT Automation	Security	Sustainability	Application Modernization	Software and SaaS partners
	Watson Orchestrate Watson Assistant Planning Analytics	Turbonomic Instana	QRadar MaaS360	Envizi EIS Maximo	API Connect	
AI and data platform	**watsonx** watsonx.ai watsonx.data watsonx.governance					
	Cloud Paks					
Hybrid cloud platform	**Red Hat** OpenShift Enterprise Linux Ansible Automation Platform