

Putting AI to work with IBM

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AI is having Netscape
moment...

...Foundation Models
are bringing an
inflection point in AI

...but how enterprises
adopt and execute will
define whether they
unlock value at scale

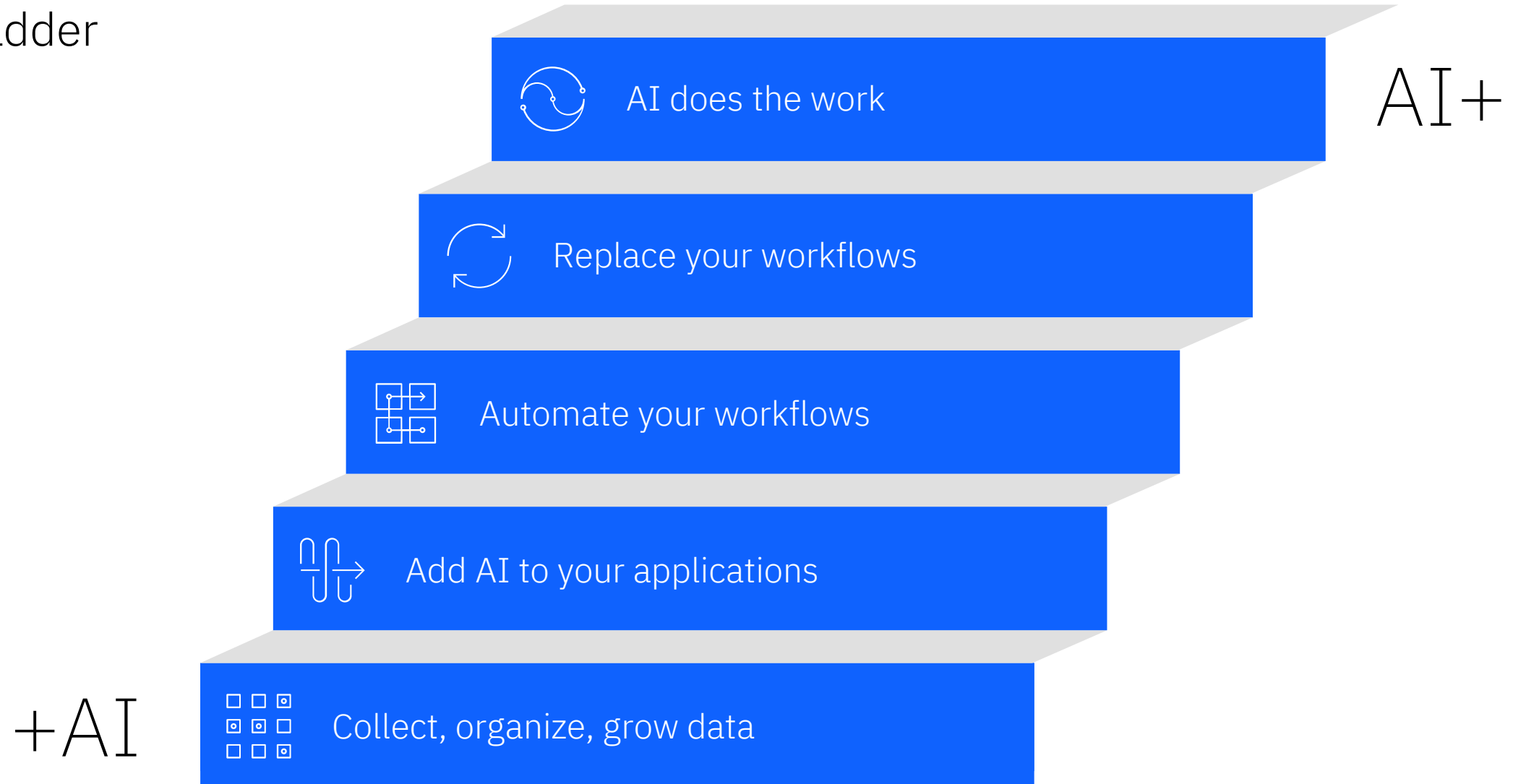
... And reinvent how
work gets done across
business domains and
industries

Reinventing how work gets done

+ AI → AI +

Reinventing how work gets done | +AI to AI+

The modern-day AI ladder



The impact of generative AI | The opportunity

The speed, scope,
and scale of
generative AI
impact is
unprecedented

Massive early
adoption

80%

of enterprises are working with or
planning to leverage foundation
models
and adopt generative AI

Broad-reaching
and deep impact

Generative AI could raise
global GDP by

7% within 10 years

Critical focus of AI
activity and
investment

Generative AI expected
to represent

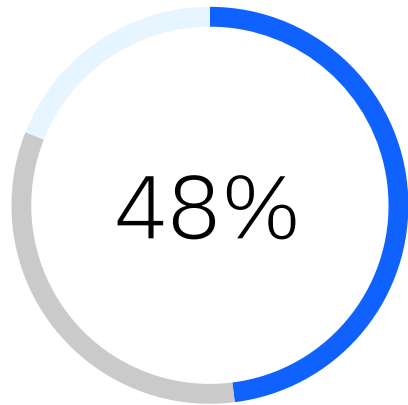
30%
of overall market by 2025

Enterprise considerations

Business leaders face challenges in scaling AI across the enterprise with trust

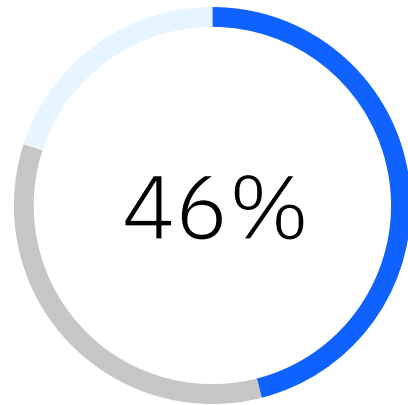
80% of surveyed business leaders see at least one of these ethical issues as a major concern

Explainability



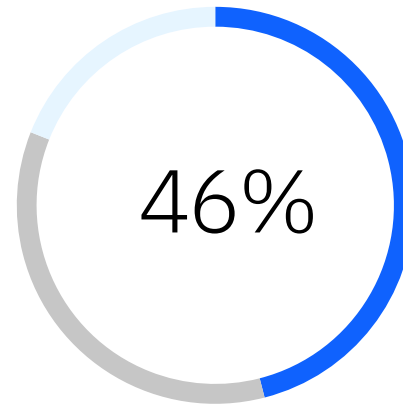
Believe decisions made by Generative AI are not sufficiently **explainable**.

Ethics



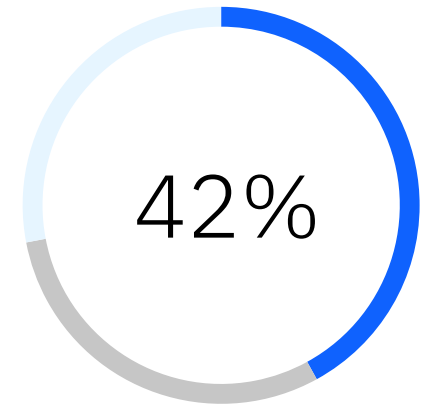
Concerned about the safety and **ethical** aspects of Generative AI.

Bias



Believe that Generative AI will propagate established **biases**.

Trust



Believe Generative AI cannot be **trusted**.

IBM POV: Four core principles to tailor generative AI for enterprise

Open

- Based on the best AI and cloud technologies available.
- Giving access to the innovation of the open community and multiple models.

Targeted

- Designed for targeted business use cases, that unlock new value.
- Including curated models that can be tuned to proprietary data and company guidelines.

Trusted

- Offering security and data protection.
- Built with governance, transparency, and ethics that support increasing regulatory compliance demands.

Empowering

- On a platform to bring your own data and AI models that you tune, train, deploy, and govern.
- Running anywhere, designed for scale and widespread adoption to truly create enterprise value.

Prolifics

United States

“We knew we needed a very, very intuitive, easy-to-use front end. We chose the Intellective Unity content navigation solution. It integrates with all Cloud Pak for Automation components and provides a very rich, customizable user interface.”

Matt Garst, Head of North America Sales , IBM Business Partner Prolifics



Ideatolife

United Arab Emirates

“We saw the hands-on support and consultancy that the IBM team provided. It’s not just that they supported us in designing the best architecture, but they also let us easily scale the solution, which is important for us as a growing business. It’s letting us tap into new customers and new segments that we’ve never been in before.”

Ali Zein, CEO, IBM Business Partner Ideatolife, Inc.



Assima

France

“Partnering with IBM is really providing a differentiated, truly SaaS-enabled, scalable solution to our clients to meet their needs as far as employee training and adoption’s concerned”

Riz Khaliq CEO, Assima



Dubber

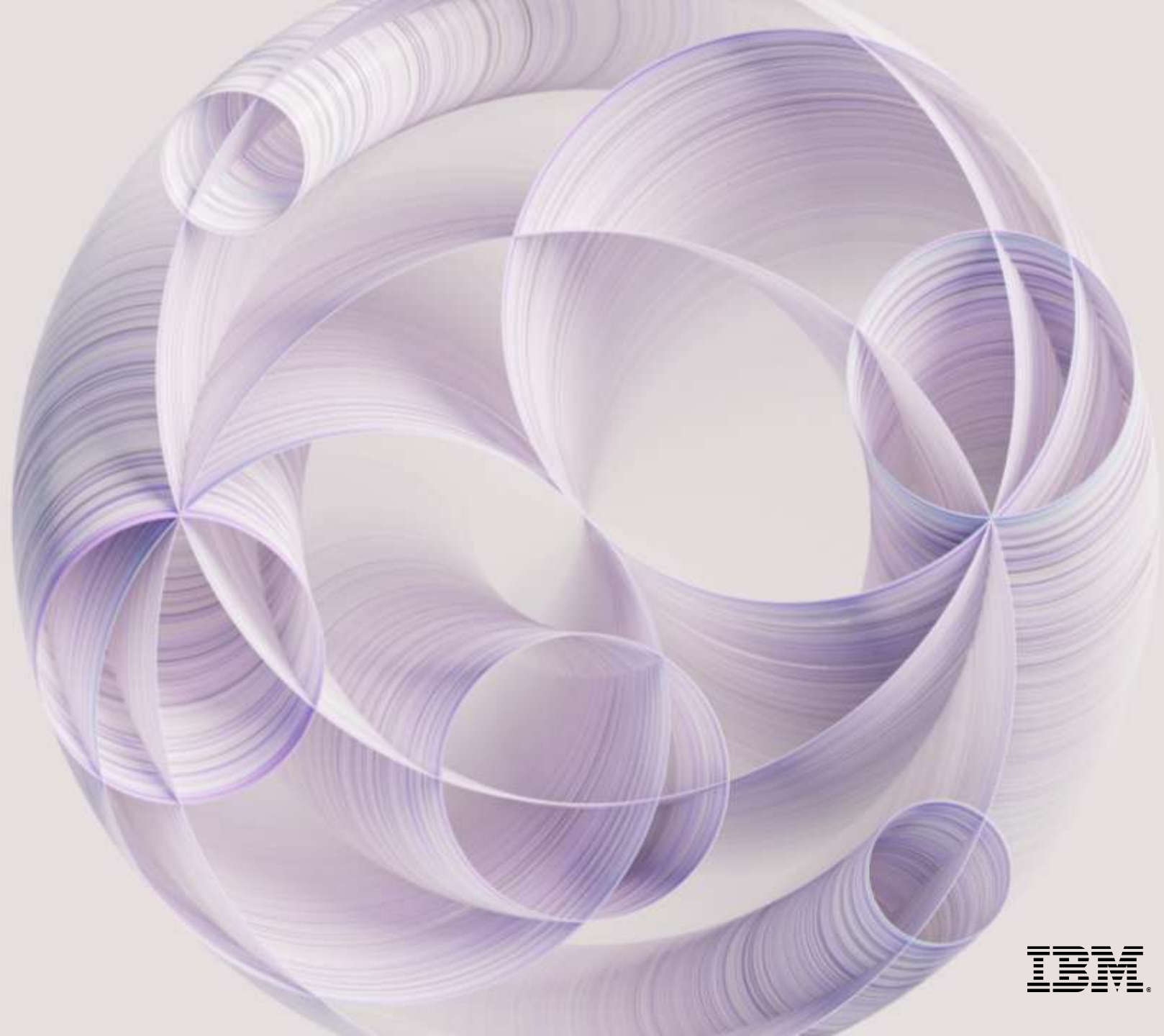
Australia

“We wanted to marry Dubber call recording, embedded with Watson AI, with the infrastructure of a telco network or UC [unified communications] solution — all at the price-point of a utility. At a price enterprises and governments value.”

Steve McGovern, CEO, IBM Business Partner Dubber Corporation Ltd.

AI for Business: Build to Win

Debasish Roy
CTO, Ecosystem APAC



AI adoption—more than doubled since 2017

20%
(2017)

2.5X

50%
(2022)

Reinventing how work gets done | +AI to AI+

Employee productivity is expected to be the primary driver of economic value

There is widespread interest in applying AI across business functions.

Customer service and IT processes consistently emerge as top priorities across research studies.

Executives are embracing generative AI and large language models (LLMs) to optimize and automate:

63%

IT processes

57%

Customer service workflows

45%

Supply chain

41%

HR and talent management

40%

Sales and marketing

35%

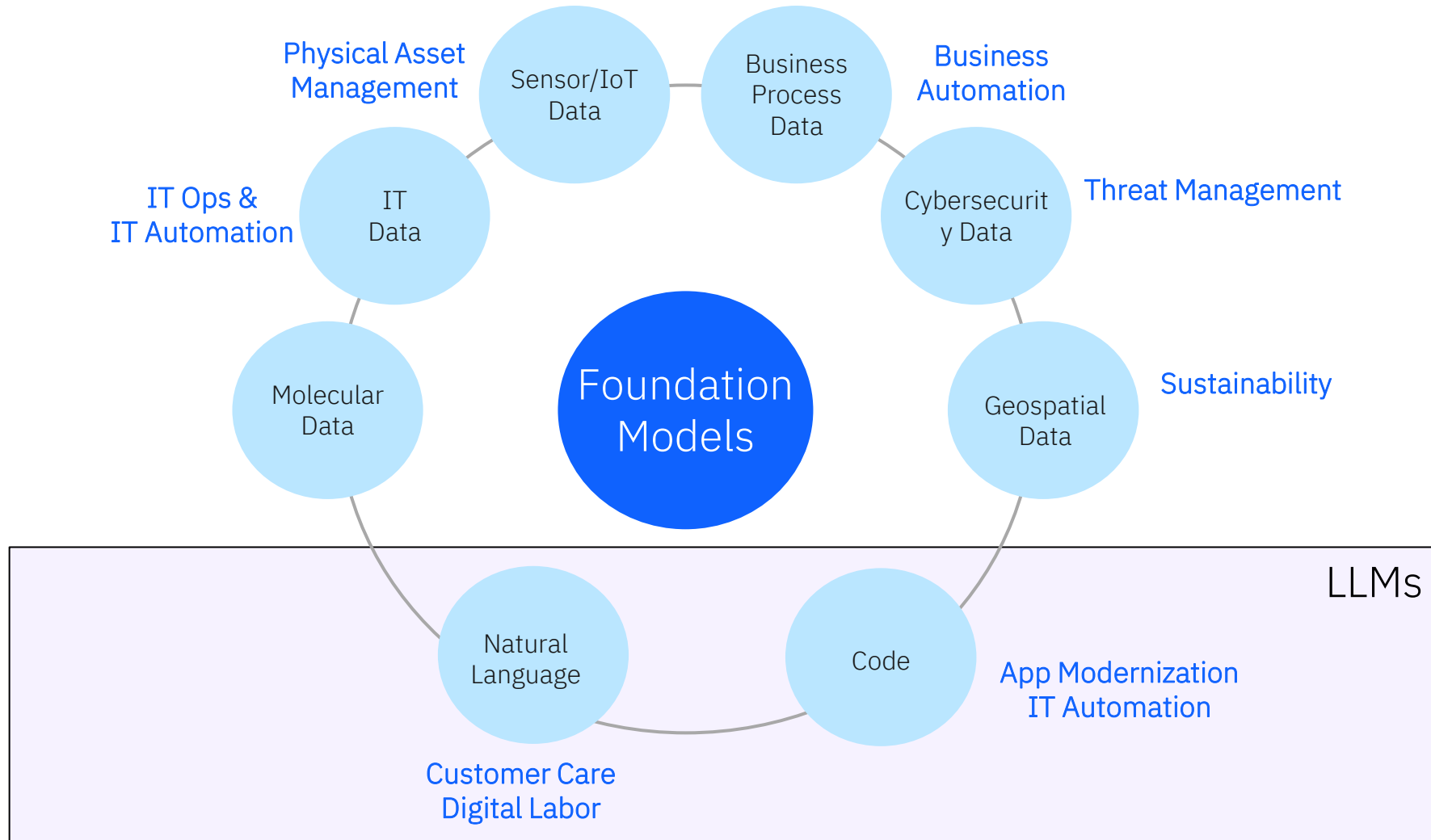
Operations

34%

Finance

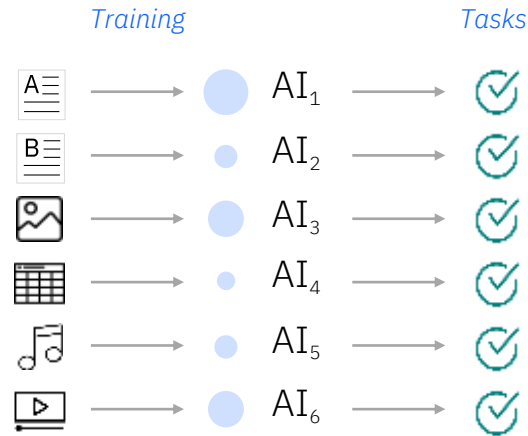
The impact of generative AI | The opportunity

Opportunity to unlock business advantage with foundation models trained across the breadth of enterprise data



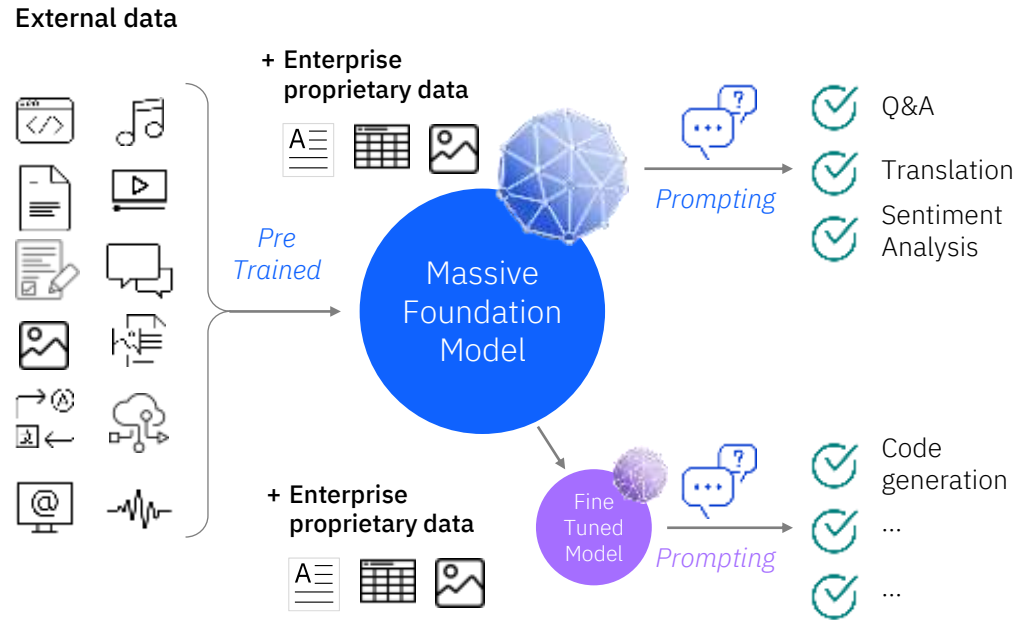
Foundation models establish a new paradigm for AI capabilities

Traditional AI models



- Individual siloed models
- Require task specific training
- Lots of human supervised training

Foundation Models



- Massive multi-tasking model
- Adaptable with minimized training
- Pre-trained unsupervised learning

Enhanced capabilities

- Summarization
- Conversational Knowledge
- Content Creation
- Code Co-Creation

Key advantages

- Lower upfront costs through less labeling
- Faster deployment through fine tuning and inferencing
- Equal or better accuracy for multiple use cases
- Incremental revenue through better performance

up to **70% reduction** in certain NLP tasks

Reinventing how work gets done |
+AI to AI+

The most common generative AI tasks implemented today

Retrieval-Augmented Generation

Based on a documents or dynamic content, create a chatbot or question-answering feature.

Building a Q&A resource from a broad knowledge base, providing customer service assistance

Summarization

Transform text with domain-specific content into personalized overviews that capture key points.

Conversation summaries, insurance coverage, meeting transcripts, contract information

Content Generation

Generate text content for a specific purpose.

Marketing campaigns, job descriptions, blog posts and articles, email drafting support

Named Entity Recognition

Identify and extract essential information from unstructured text.

Audit acceleration, SEC 10K fact extraction

Insight Extraction

Analyze existing unstructured text content to surface insights in specialized domain areas.

Medical diagnosis support, user research findings

Classification

Read and classify written input with as few as zero examples.

Sorting of customer complaints, threat and vulnerability classification, sentiment analysis, customer segmentation

Enterprise Considerations

Enterprise considerations

As leaders adopt AI, they need to consider three things:

1

How to create competitive edge

2

How to scale AI across the business

3

How to advance trustworthy AI

What IBM offers

Introducing...

watsonx

Put AI to work with **watsonx**.

Scale and accelerate the impact of AI with trusted data.

Train, tune and deploy AI across your business,
leveraging critical, trusted data wherever it resides.

What IBM offers

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, built on
an open lakehouse architecture,
supported by querying, governance
and open data formats to access
and share data.

watsonx.governance*

Enable responsible, transparent
and explainable
AI workflows

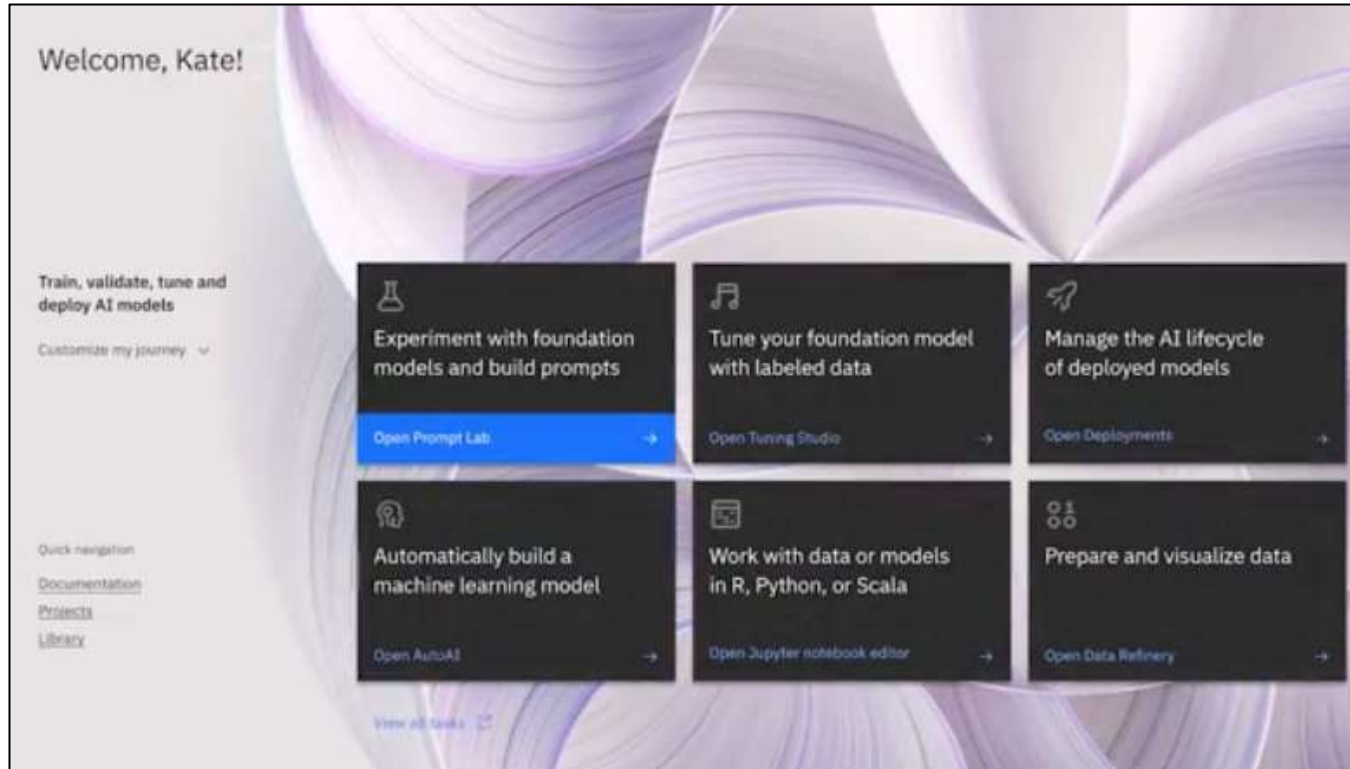
End-to-end toolkit for AI governance
across the entire model lifecycle to
enable responsible, transparent, and
explainable AI workflows.

** Targeted for release in end-2023*

What IBM offers

watsonx.ai

Train, validate, tune and deploy AI models



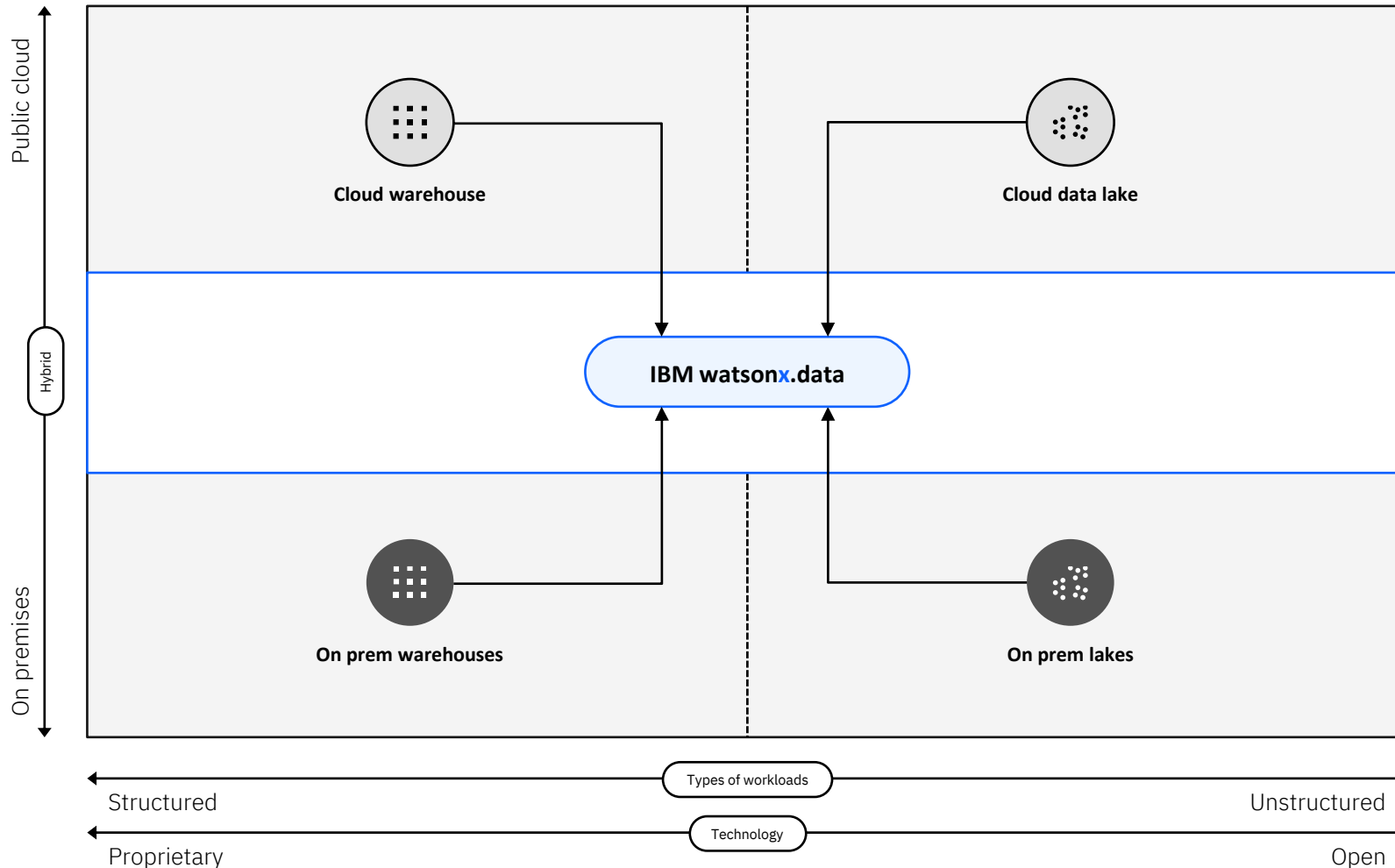
A next generation enterprise studio for AI builders to train, validate, tune and deploy generative AI, foundation models, and machine learning capabilities

- **Foundation Model Library** with IBM and open-source models
- **Prompt Lab** to experiment with foundation models and build prompts for various use cases and tasks
- **Tuning Studio** to tune your foundation models with labeled data
- **Data Science and MLOps** to build machine learning models automatically with model training, development and visual modeling

What IBM offers

watsonx.data

Scale AI workloads, for all your data, anywhere



A fit-for-purpose data store based on an open lakehouse architecture

- 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.

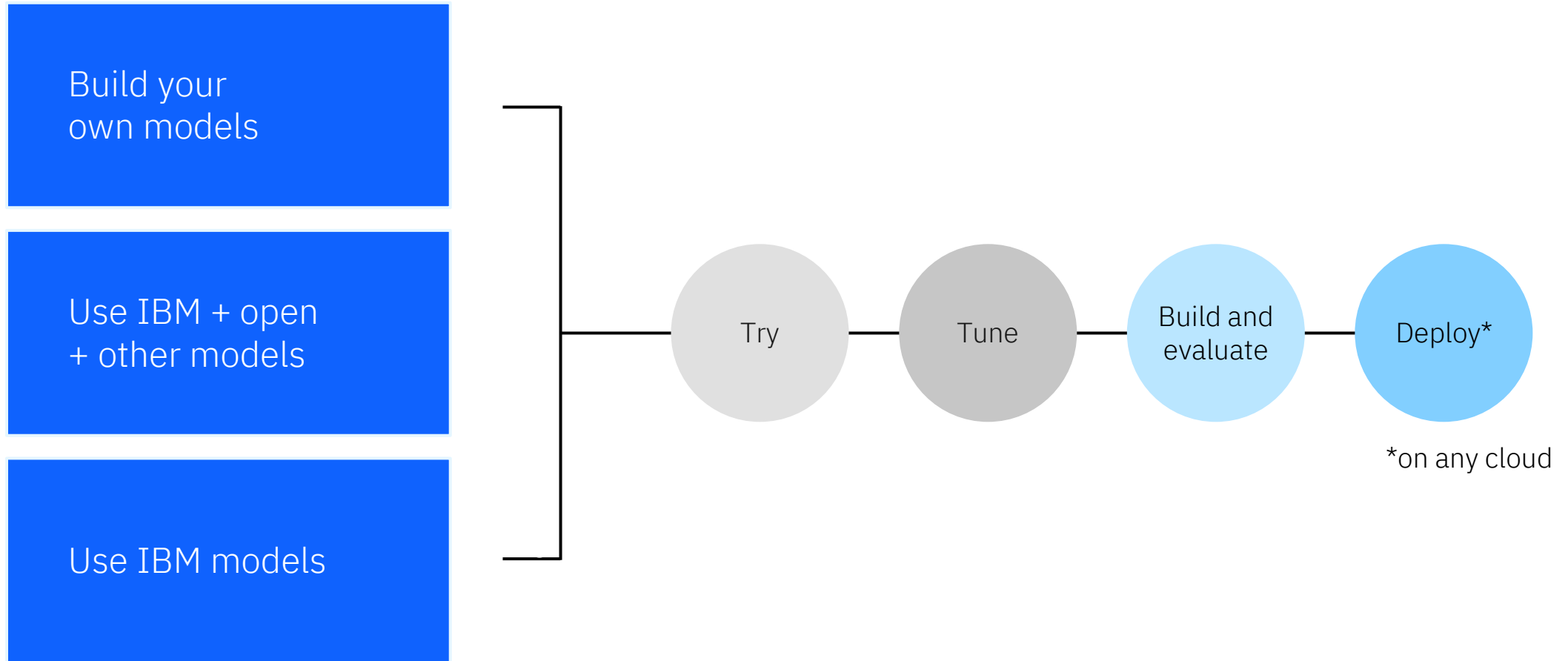
What IBM offers

IBM approach for AI: Unleash the intelligence in your business



What IBM offers

AI will be multi-model on multicloud



Embeddable AI



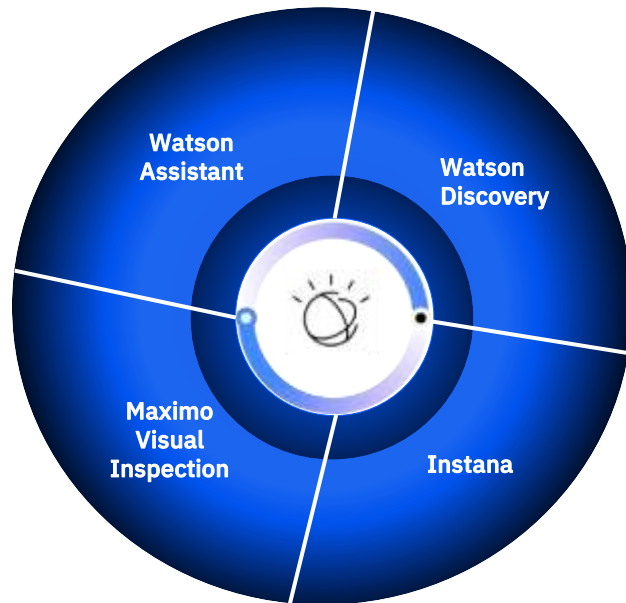
A set of flexible, enterprise-grade AI capabilities that developers can easily embed in their applications to provide an enhanced end user experience through powerful AI models

Fit-for-purpose for your business, with domain optimized applications down to embeddable libraries, designed with trust from the ground up

The form factor that best fits your business from domain optimized applications to embeddable libraries

Applications

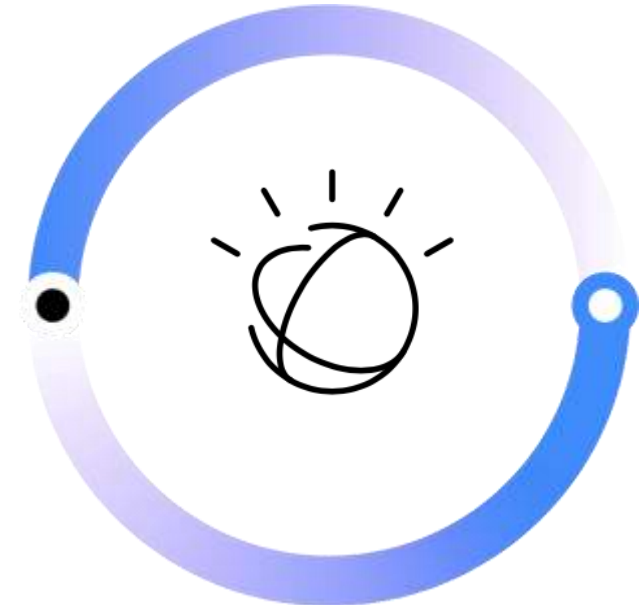
Virtual Agent, AI-Driven Insights, Observability & Vision



Pre-Built, Pre-Trained
Business Domain Optimized

Libraries/APIs

Natural Language Processing, STT, TTS, Document Understanding, Time Series, Spatiotemporal



Flexible & Extensible
Deployed Anywhere

What IBM offers

IBM's AI is embedded in applications built on

watsonx

Watson Orchestrate

Harnesses the power of AI and automation to free up individuals from tedious tasks

40%

Improvement in HR productivity

Watson Assistant

Builds better virtual agents, to deliver consistent and intelligent customer care

70%

Call center calls contained by conversational AI

Watson Code Assistant

Enables hybrid cloud developers to write code with AI-generated recommendations

30%

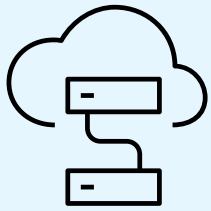
Productivity gain in application modernization

AI and data platform

watsonx

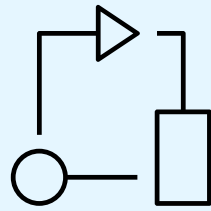
What IBM offers

IBM's AI can be consumed as a platform or in products



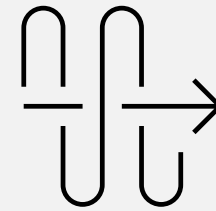
AI and data platform

Build and run on our enterprise-grade, cloud-native, AI and data platform, **watsonx**, that helps you simplify how you build and apply foundation models and generative AI



AI products

Consume the benefits of generative AI and foundation models in our products built on **watsonx**, such as Watson Orchestrate, Watson Assistant, Watson Code Assistant



Partners' products

Consume **watsonx** foundation models in our partners' software products (e.g., SAP) where we help them deliver incremental innovation faster

What IBM offers

Three proven, high impact use cases as starting points with IBM

Talent

40%

Improvement in HR productivity

- Talent acquisition
- Performance management
- Employee data management
- Employee communications
- Learning & event management

Customer service

70%

Contact center cases contained by conversational AI

- Customer profile / demographics
- Case deflection
- Agent intent efficacy
- Agent assist
- Mobile FAQ w/ answers

App modernization

30%

Productivity gain in application modernization

- Automated code generation
- Customizable standards
- Playbook generation
- Model tuning
- Code attribution

Generative AI tasks

Content Generation, Classification

Train and tune relevant foundation models using company-specific HR data spanning hybrid environments

Retrieval-Augmented Generation, Summarization, Classification

Train and tune relevant foundation models using customer specific datasets to improve customer satisfaction

Summarization, Content Generation

Automate code generation and reduce cycle time for modernizing applications, based on requirements and business rules

What IBM offers
Why IBM?

Open

IBM's AI is based on the best open technologies available

Trusted

IBM's AI is transparent, responsible, and governed

Targeted

IBM's AI is designed for enterprise and targeted at business domains

Empowering

IBM's AI is for value creators, not just users

Thank You

IBM