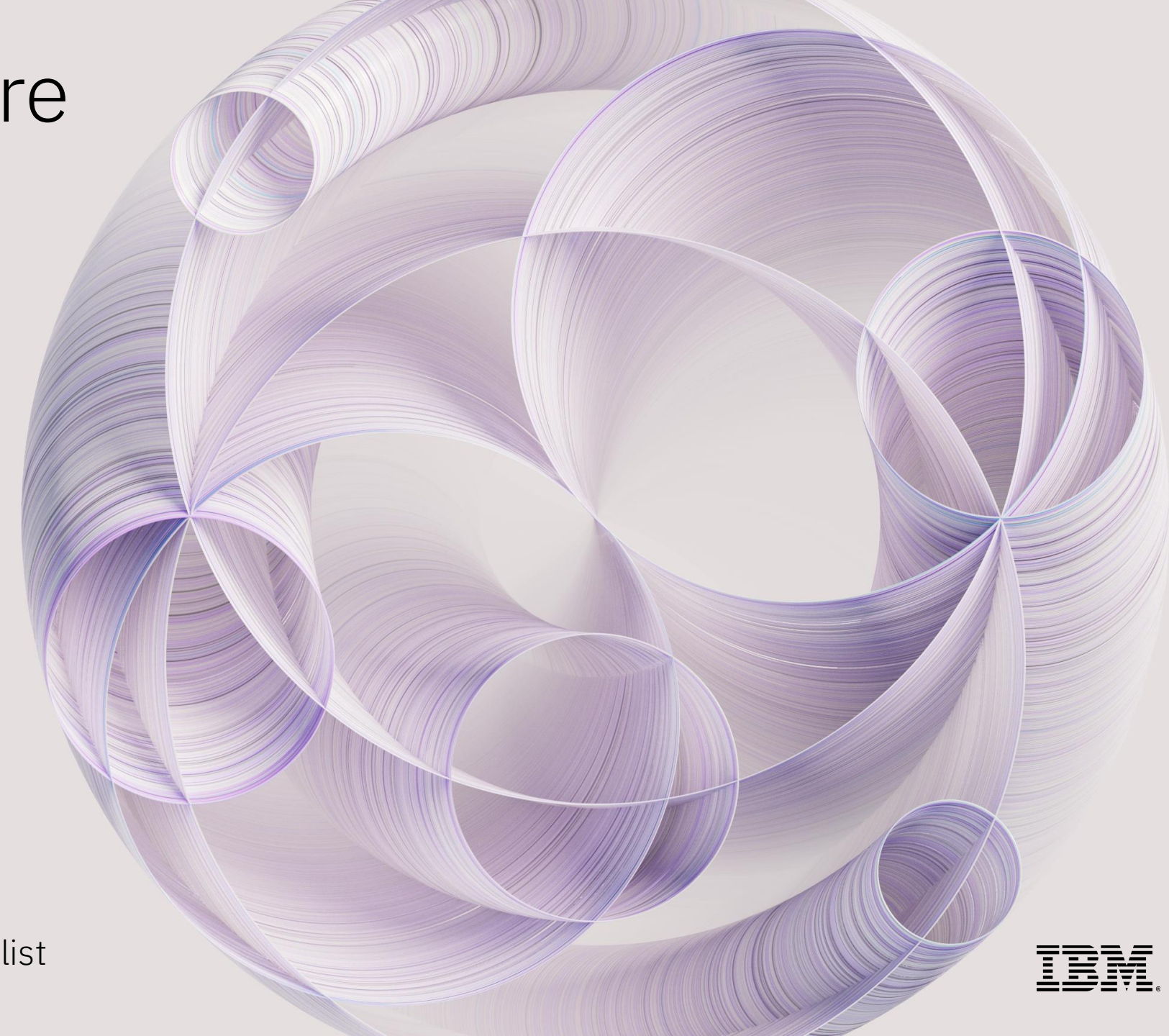
Shaping the future with AI



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IBM

Agenda

1 Introduction

- What is IBM doing today
- IBM in numbers
- IBM in Portugal

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2 Artificial Intelligence

- Core components of AI
- The power of AI and Automation
- IBM journey + IBM AI strategy
- IBM watsonx

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3 How and where can AI be applied

- Use cases
- IBM client references
- Useful links

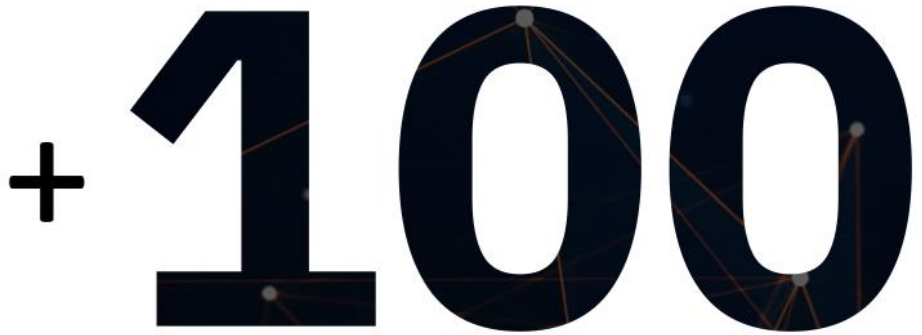
What is IBM doing today

IBM in numbers

years

years
in Portugal

Business Lines



Business Partners
in Portugal

IBM in Portugal

IBM

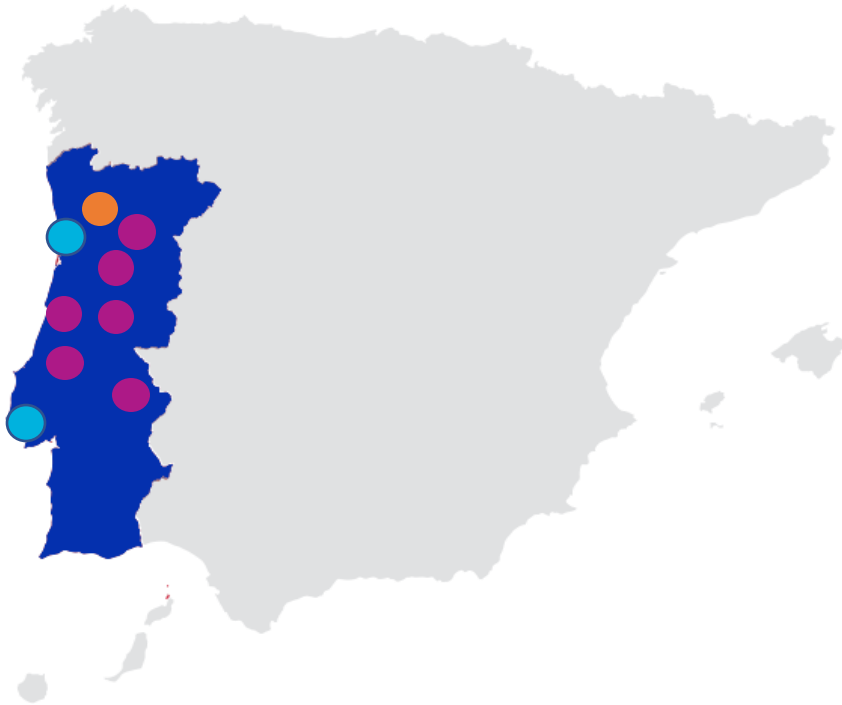
IBM Consulting™

SOFTINSA

Headquarters in Lisbon and 1 office in Porto

6 Technology Inovation Centers
Tomar, Viseu, Fundão, Portalegre, Vila Real and Coimbra

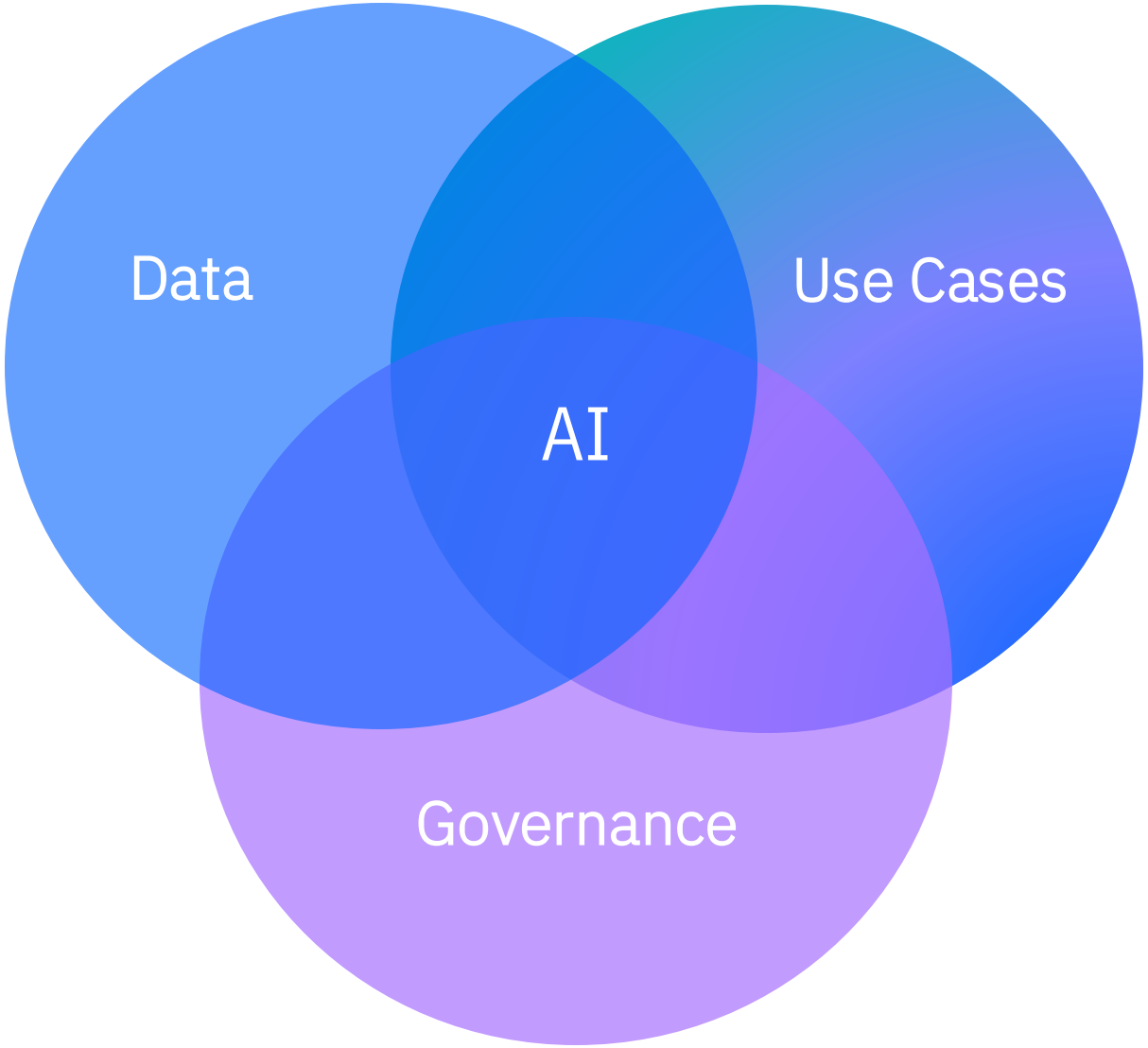
1 Business Transformation Center
Braga



Why IBM

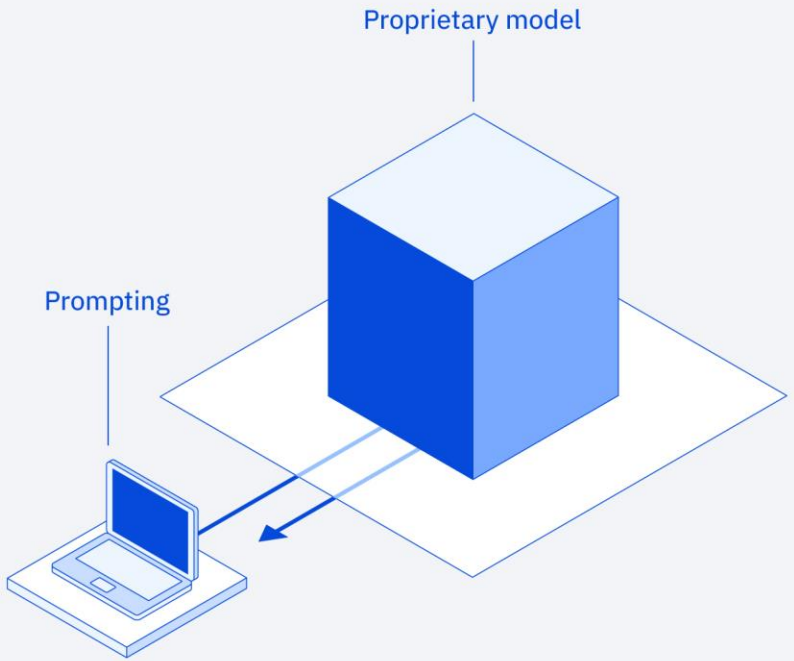
Open	IBM’s AI is based on the best open technologies available
Trusted	IBM’s AI is responsible, transparent, explainable and governed
Targeted	IBM’s AI is designed for enterprise and targeted at business domains
Empowering	IBM’s AI is for value creators, not just users

Core components of AI

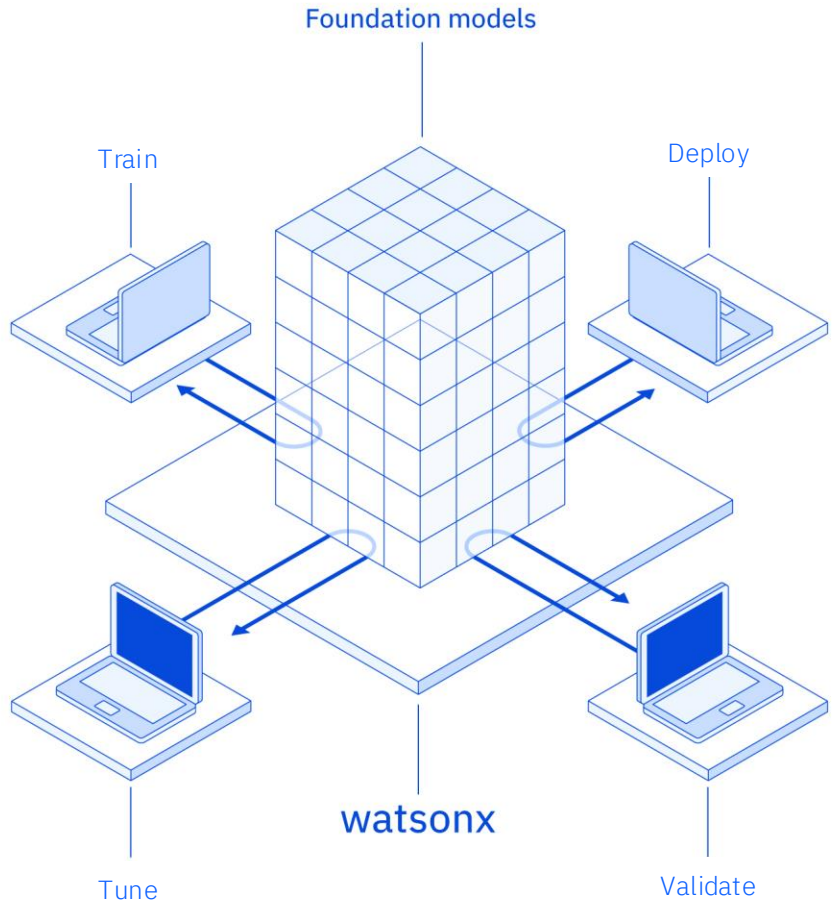


Types of AI

AI user



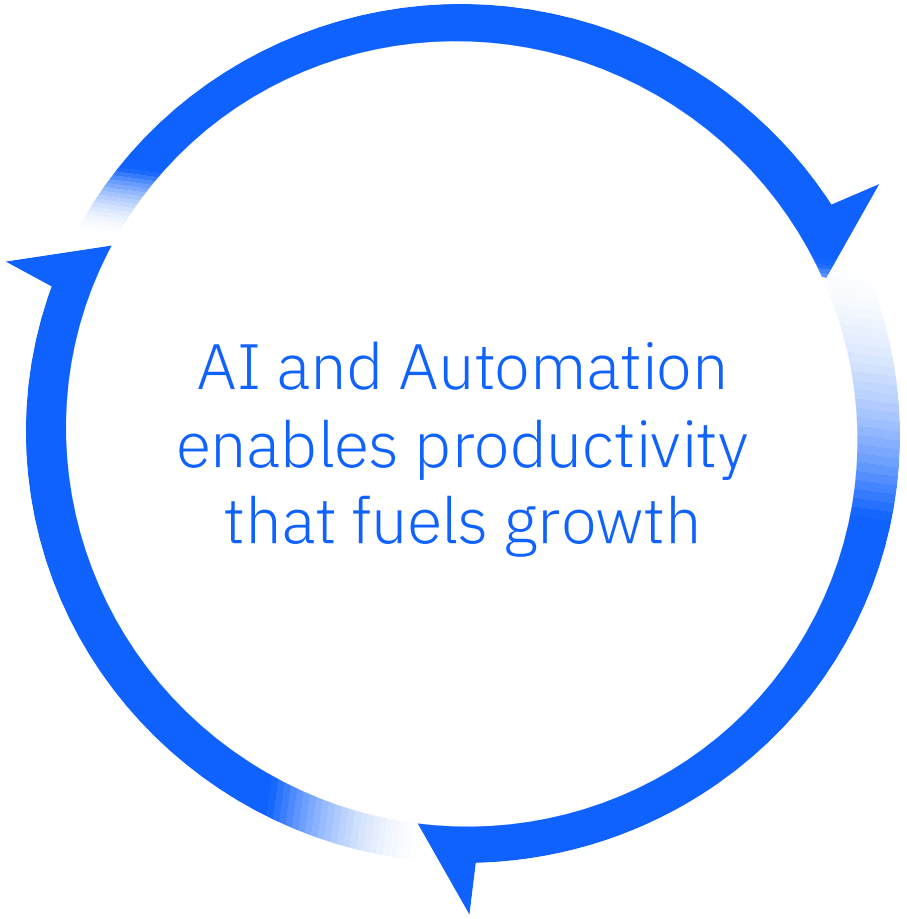
AI enterprise



The power of AI and Automation

Eliminating operating complexity

Deploying AI across all operations



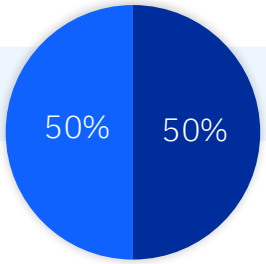
Simplifying our end-to-end workflows

Automating manual tasks

IBM Journey

2023

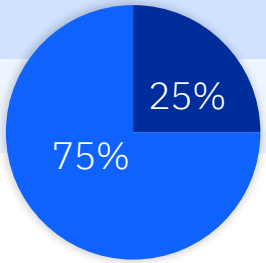
Eliminate. Simplify. Automate.



- Automation
- AI

2024

+AI -> AI+



- Automation
- AI (70+ use cases already in production)

The path to $3.5B

Initial goal:

$2B

Productivity savings 2024

Achieved:

$3.5B

Productivity savings 2024

AskEPM

100% of questions answered (budget, forecast, reports on business performance, ...)

watsonx.ai

Support case summarization

$1.1M annual operational savings

watsonx

AskSales

50-70% of repetitive tasks automated

watsonx Orchestrate

IT Operations

70% of Ansible Playbook content generated 6x faster

watsonx code assistant

Supply Chain

$150M reduction in supply chain costs

watsonx

Marketing

67% content creation efficiency gain for supported asset types

watsonx.ai

AskHR

94% of questions answered

watsonx assistant

Finance

95% benchmark accuracy of touchless forecasting

watsonx

Procurement

90%+ reduction in time to solve blocked invoices

watsonx.ai
Watsonx Orchestrate

Introducing…

watsonx

watsonx

A portfolio of AI products that accelerates the impact of generative AI in core workflows to drive productivity.

watsonx.ai

Train, validate, tune and deploy AI models

watsonx.data

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

watsonx.governance

Accelerate 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.

watsonx Orchestrate

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

watsonx Code Assistant

Accelerate development, application modernization, and assist with IT Operations

watsonx BI Assistant

Answers your business questions quickly, guiding towards the most impactful decisions

Understand what happened and why, what might happen, and what you can do about it.

The University of Auckland

Enhance students experience with IBM watsonx Assistant chatbot

- The University of Auckland, with its 46,000 students, faced significant challenges, as it transitioned to virtual learning during the pandemic.
- Students sought answers that frequently changed, making it critical to deliver up-to-date information swiftly. Additionally, the lack of a robust search system hindered efficient information retrieval.
- IBM, developed a tailored conversational AI solution for the University of Auckland - UoA Assistant (IBM watsonx Assistant + IBM Watson Discovery) featuring advanced Natural Language Understanding (NLP).
- This AI chatbot addressed high-volume, repetitive questions and seamlessly integrated with existing systems for personalized responses, allowing students to easily find information on a single platform without navigating multiple search pages.

90%

The UoA Assistant resolves most queries without human intervention

81%

Students' satisfaction measure with the UoA Assistant

40%

Improvement in first-time resolution

58%

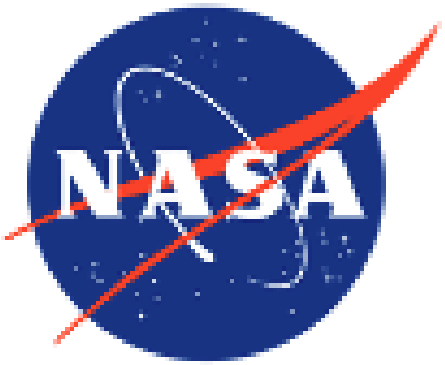
Improvement in the ratio of self-service to assisted service

Reference: https://www.ibm.com/case-studies/university-of-auckland

NASA

Collaborated with IBM to train a geospatial foundational model using IBM watsonx.ai

- This model was trained using 40 years of Earth observation data and can be used to:
  - Detect natural hazards and track changes to vegetation and wildlife habitat.
  - Detect and predict severe weather patterns – floods, wildfires, etc
  - Simulate and project short-term weather as well as long-term climate changes
  - Build weather and climate applications faster, more accurate and more accessible
  - By harnessing the power of AI, policymakers have a vital new resource at their disposal, one that could help steer us away from catastrophe and towards a more sustainable future.



Reference: https://newsroom.ibm.com/2024-09-23-ibm-and-nasa-release-open-source-ai-model-on-hugging-face-for-weather-and-climate-applications

Sevilla FC

Transforms the player recruitment process with IBM watsonx platform

- IBM and Sevilla FC introduced Scout Advisor - an innovative generative AI tool to provide the scouting team with a comprehensive, data-driven identification and evaluation of potential recruits.
- Leveraging watsonx to search and analyze massive amounts of information to evaluate potential recruits.
  - Quantitative data such as height and weight, speed, number of goals or minutes played.
  - Qualitative unstructured data such as the textual analysis contained in their more than 200,000 scouting reports.
- This approach is designed to further enhance player identification process, to help them to make more efficient and informed recruitment decisions.

Reference: https://newsroom.ibm.com/2024-01-23-Sevilla-FC-Transforms-the-Player-Recruitment-Process-with-the-Power-of-IBM-watsonx-Generative-AI

US Open

Design, develop and deliver AI-powered solutions that enhance fans' digital experience

- Where you see tennis, IBM sees data. Every game in every match from every player on every court.
  - Likelihood to Win calculates the probability of each player to win the match based on player statistics, expert opinions and player's momentum.
  - Match Reports are AI-generated post-match summaries based on all the metrics gathered during a match.
  - AI Commentary adds AI-generated commentaries, for every match highlights.
  - SlamTracker features AI-generated match previews, recaps and provides real-time scores, statistics and in-depth analyses of every match.
- 7+ million data points (ball speed, swing speed, frontend and backend count, score, players movements, position of the ball, etc) are captured and analyzed throughout the tournament.

Reference: https://www.ibm.com/case-studies/us-open

US Open

MATCH PREVIEW With assistance from **IBM® watsonx™**

- Keys, who has won 74% of her matches this year, plays Pegula, who has won 76% of her matches.
- World No. 11, Keys from the United States, is set to compete against World No. 5, Pegula, also from the United States.
- Pegula holds a 1-0 lead in their head-to-head record

MATCH RECAP With assistance from **IBM® watsonx™**

- In Round four, Keys defeated Pegula, in a two set victory, 6-1,6-3.
- Keys' first serve accuracy was 70%, 4th among players in the field.
- Keys overcame Pegula, converting five break points to secure the win.

MATCH REPORT

Key takeaways from the Match

At the US Open, a highly anticipated match took place between Madison Keys, ranked No.11, and Jessica Pegula, the world No.5. Keys, who had secured 33 match wins this year, boasted a 74% win rate on the WTA Tour. Meanwhile, Pegula had accumulated an impressive 46 match victories, with a win rate of 76% in 2024. As the two American players faced off, their strong track records set the stage for a thrilling competition.

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With assistance from **IBM® watsonx™**

Reference: https://www.ibm.com/case-studies/us-open

Many other use cases and partnerships

NDA Agreement

xxx and IBM have worked to create an AI-powered virtual assistant that maintenance operators can use to search, over large volumes of documentation, to get all the necessary answers to resolve an issue in seconds.

The solution connects to the vessel's internal systems and works without internet access.

Redshift

Traditional complaints management, are done using manual processes which presents challenges in terms of efficiency and scalability.

This solution automates the classification and distribution of complaints, generates concise summaries and suggests personalized responses.

Barilla

Focus on employees to keep knowledge alive and map technical skills.

AI-powered solution designed to improve professional experience, allowing for the analysis of training gaps, performance evaluation, engagement and development of skills.

Virgin Money

AI-powered banking virtual assistant to boost customer engagement.

The new assistant would interact directly with customers and connect to the company's core systems through APIs, enabling customers to make changes to their accounts in real time.

GRAMMYs

In response to the devastating wildfires in the Los Angeles area, the Recording Academy and MusiCares have launched a relief program to aid music professionals impacted by the crisis.

IBM has developed AI assistants that can answer frequently asked questions, facilitate donations.

Audi

Make customer interaction even more innovative and efficient with an AI-supported voicebot assistant.

Helps to provide appropriate answers to callers, reducing call volume per agent, faster resolution and higher quality customer responses. It also creates a summary of the call for further analysis.

Many other use cases and partnerships

Scuderia Ferrari F1

Conceive, develop and deliver world-class digital experiences to to supercharge the fan experience, bringing “Tiffosi” closer than ever to the racing team.

Analyze and transform Ferrari's massive volume and variety of data – both current and historical – into custom insights, personalized content and innovative features.

Masters

Where you see golf, we see data. And with the help of watsonx, IBM is using generative AI to transform Masters.

Transform Masters data into AI-powered narration and insight about every shot, from every player, on every hole. The goal is to deliver a digital experience unlike any other to all the golf fans around the world.

Wimbledon

Wimbledon works closely with IBM to provide fans with AI-generated insights and world-class digital experiences.

IBM transforms over 2.7 million Wimbledon data points into match insights, previews and summary for every match and calculates each player likelihood to win the match and the tournament.

UFC

UFC and IBM worked together to create UFC Insights Engine using IBM watsonx.

UFC will transform the data gathered during every matchup into advanced analysis, statistical insight and compelling storylines shared onsite, in the broadcast and over social media bringing a new level of understanding to every UFC fan.

ESPN Fantasy Football

ESPN and IBM worked together to infuse AI on the ESPN Fantasy app.

Boom or bust projections to predict if a player will meet or fail his scoring projections for each week, suggestion of trades based on the fantasy team and generation of reasoning information per player based on insights.

What’s next?

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Useful Links

IBM Careers	https://www.ibm.com/careers/search
AI Terminology	https://www.youtube.com/watch?v=Beh13Cd_QbY
IBM Youtube Channel	https://www.youtube.com/@IBMTechnology
IBM Skills Courses	https://www.coursera.org/instructor/ibm-skills-network