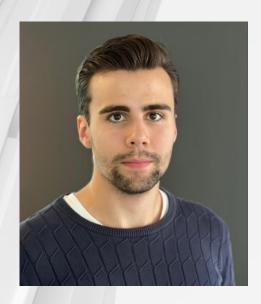


WHO ARE WE?



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WELCOME



Agenda

- Introduction
- Evolution of maintenance
- Generative AI
- Work with watsonx
- Demo
- Summary and Q&A



WE ARE WORLD-WIDE



Nexer Group



2 300

EMPLOYEES



15





NEXER ASSET MANAGEMENT

Nexer Asset Management is the digitalization specialist in enterprise asset management and maintenance in the Nordics





50 SPECIALISTS
3 NATIONALITIES



We help you to get the most out of your physical assets





EVOLUTION OF MAINTENANCE



Reactive (**Breakdown or Run-to-Failure Maintenance**)



Preventive (**Time-Based Maintenance**)



Predictive (Condition-Based Maintenance)



Prescriptive (Using available data to "Prescribe" corrective actions)



WHAT IS AI?



Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions, or solving problems



A computer system that acts or think as a human.



WHAT IS GENERATIVE AI?

Generative Al refers to deep-learning models that can generate high-quality text, images, and other content based on the data they were trained on.



IMPACT OF ALIN DIFFERENT INDUSTRIES

Transportation

Helps in traffic congestion, parking shortages, and long commutes.

Retail

Generative AI can help retailers with inventory management and customer service, both cost concerns for store owners.

Manufacturing

Gen Al is improving operations and ensuring employees are following the proper steps. It can also enhance performance visibility across business units by integrating disparate data sources

Energy and Utilities

Al algorithms help manage energy grids more efficiently by predicting power demand, identifying faults, and optimizing energy distribution.



GENERATIVE AI & LLMS

Foundation Models

Foundation models serve as the backbone for various applications

Generative Al

Often relies on foundation models.

Capable of *generating new content* based on user interaction or input.

Content examples include text, computer code, and images.

Example: **ChatGPT** is a generative

Al chatbot developed using a LLM.

Large Language Models (LLMs)

Subset of foundation models.

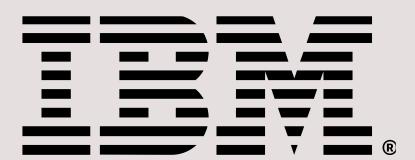
Trained using *self-supervised learning* on massive text datasets.

- LLMs are machine learning models.
- Learn patterns and structures from extensive textual data.
- LLMs excel in a variety of **natural language processing** tasks.
- Examples include language translation, summarization, and question answering.

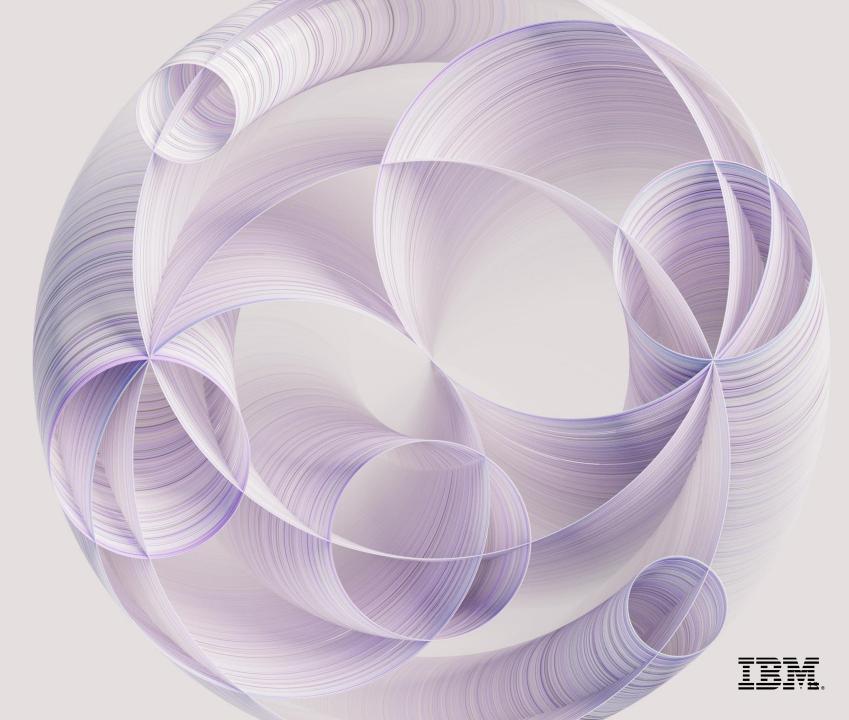
Meta has LLAMA-2, Google has FLAN, OpenAI has GPT3.5/4



How do we use this technology to create business value?



Introducing... Watsonx



The platform for AI and data

watsonx

Scale and accelerate the impact of Al with trusted data.

watsonx.ai

Train, validate, tune and deploy Al 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 Al 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.

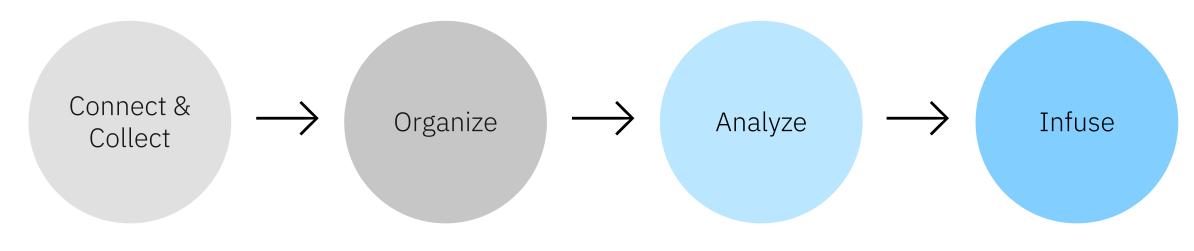
watsonx.governance

Enable responsible, transparent and explainable data and Al workflows

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



End-to-end platform for integrating AI in businesses



Various databases and storage options, including files in IBM Cloud, Microsoft Excel, and local storage.

Govern and automate the data & Al lifecycle

Refine and enrich assets, assess quality

Self-service

Visualize and explore

Analyze

Build ML models

Train, Tune and Evaluate LLM

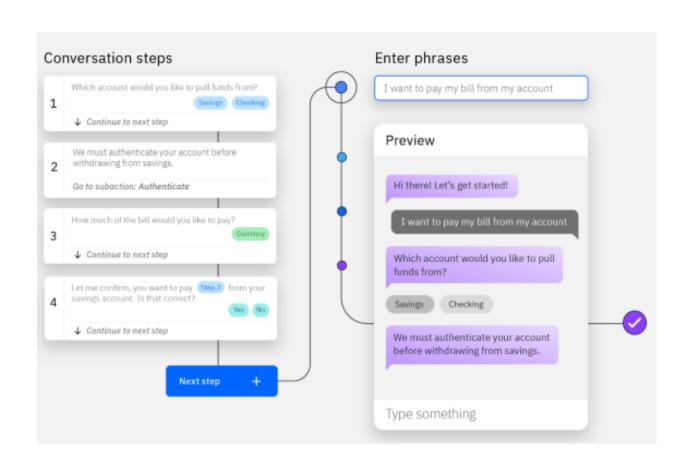
Deploy AI models as scalable APIs

Measure and track Al outcomes



WATSONX ASSISTANT

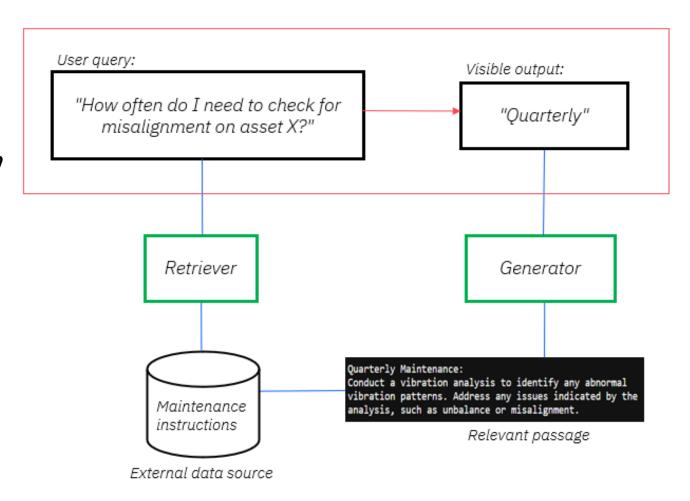
- Gives your existing Al Models the familiar look & feel of a chatbot style interface
- Integrated with Al Governance and Data Management tools
- Enables you to fully control conversational flow between your end users and large language models
- Built to be integrated with your other services, for instance website or mobile apps





LLM with RAG

- A Large Language Model (LLM) can be augmented using Retrieval Augmented Generation (RAG)
- RAG is applied with an existing LLM, such as GPT4 or GPT-SW3, to give the model a source of knowledge that is not found in the original training dataset.
- A narrower set of source data provides added security and reliability – also reduces risk of hallucinations
- Neither user queries nor the external data source feeds back to the model to train it – it's completely self contained







USE CASE

Objective: Showcase how Maintenance Manager John utilizes a virtual assistant (NexerX) integrated with IBM Maximo to efficiently manage maintenance tasks during his work day.

Scenario:

Morning Routine - Checking Overdue Work Orders:

- Start of the Day: John begins his workday by accessing the virtual assistant through his preferred device, whether it's a computer or mobile device.
- Natural Language Query: John asks the virtual assistant, "Can you check for any overdue work orders?"
- Response: The virtual assistant quickly retrieves and presents a list of overdue work orders, highlighting relevant details. John can review the details and prioritize his day accordingly.



USE CASE PART 2

Midday Task - Updating a Work Order:

- Task Assignment: Later in the day, John receives a notification about two critical work orders that requires immediate attention.
- Using Natural Language Interaction: John engages with the virtual assistant and says, "I need to update a work order."
- Work Order Update: The virtual assistant processes the
 request, checks the status of the work order to ensure that it can be
 updated, and then updates the WO with the relevant information. John
 receives a confirmation of the update.



USE CASE PART 3

End of the Day – Run a Report:

- Closing the Day: As the workday comes to a close, John wants to run a report summarizing the current status of maintenance tasks.
- Natural Language Request: John asks the virtual assistant, "Can you run a report for maintenance activities and open work orders?"
- **Report Output**: The virtual assistant accesses the report and sends it as a link so John can view it quickly.

Efficient Communication: Instead of navigating through Maximo's interface, John efficiently communicates his instructions using natural language, saving time and ensuring quick action.



BUSINESS VALUE



Saves **time** through automation



Improves **efficiency** through process optimization



Data **security** to protect valuable corporate data



Provides **customization** for personalized solutions



User-friendly experience through natural interaction and intuitive design.





LET'S GET IN TOUCH!

Now we've shown you what's possible – how can you use this technology in your organisation today?

We are working with this technology now and would love to work with your business cases & ideas!

Reach out to Nexer Asset Management for more information

<u>Asset Management | Nexer (nexergroup.com)</u>







