

The image features a dark grey square in the top left corner containing the text 'K&L GATES' in white. The background of the top half of the slide is a vibrant blue with abstract, flowing, wavy lines in various shades of blue and white, creating a sense of movement and depth.

K&L GATES

Artificial Intelligence & Plumbing

PMI23 Manufacturers Success Conference
October 25, 2023, Seattle, WA

Whitney McCollum, CIPP-US, E

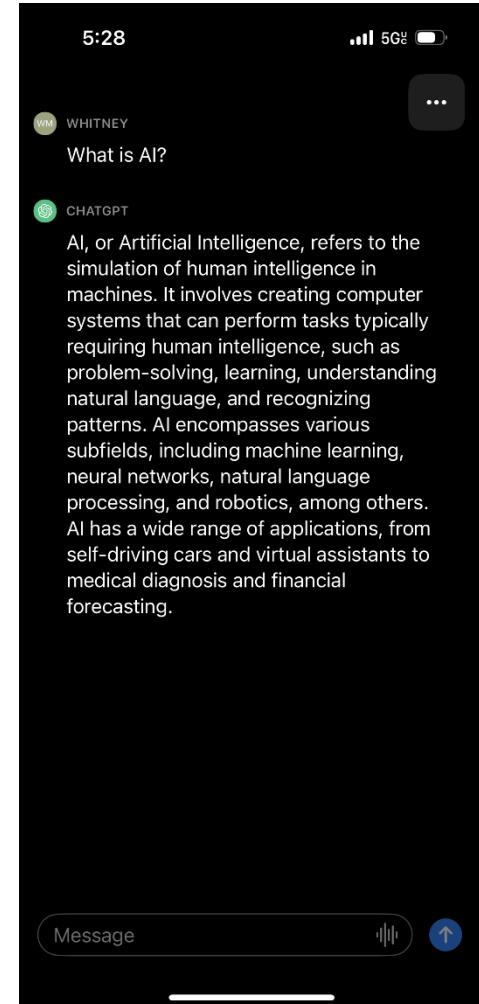


- Technology Transactions & Data Privacy Partner at K&L Gates, LLP
- Former Chief IP and Privacy counsel at AECOM
- Bay Area native, recently transplanted to Bainbridge Island
- Proud daughter of a plumber

What is Artificial Intelligence (AI)

Artificial intelligence (AI) is a set of techniques aimed at approximating some aspect of human or animal cognition using machines.

AI is used in a wide range of applications and industries. Some of the common areas where AI is applied include: Healthcare, finance, retail, manufacturing, transportation, customer service, legal services, and security.



Artificial Intelligence, Machine Learning and Deep Learning

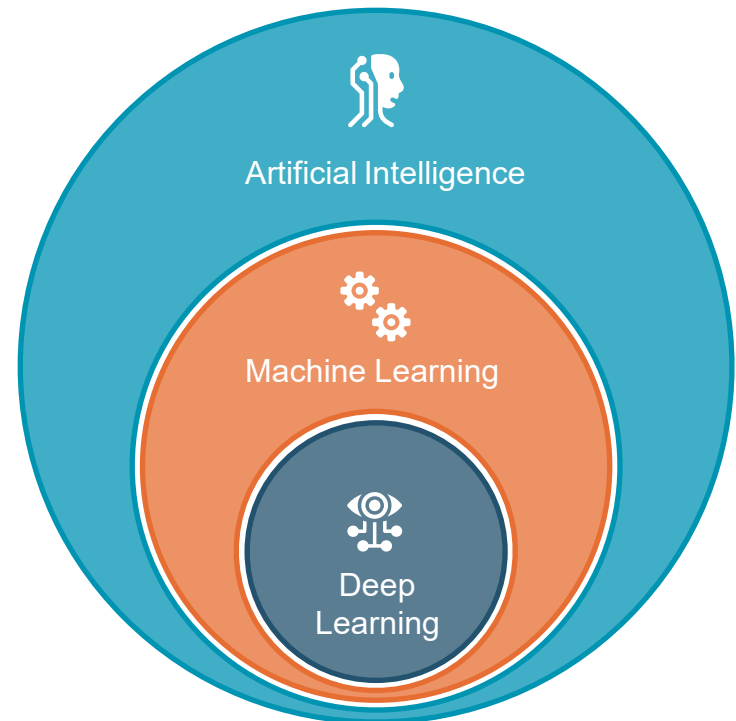
Artificial Intelligence, machine learning, and deep learning are related but discrete concepts.

Artificial Intelligence (AI):




- A set of techniques aimed at approximating some aspect of human or animal cognition using machines.

Machine Learning (ML):

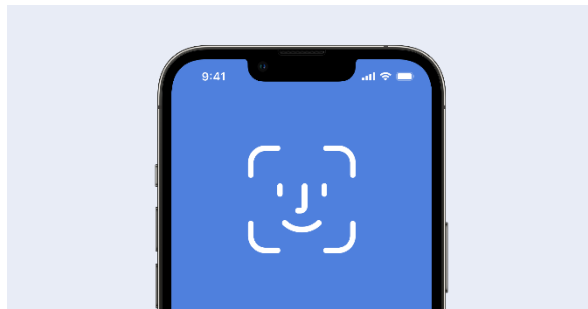
- Machine learning is a type of AI that enables computers to learn from data without being explicitly programmed. It uses mathematical models to analyze data and make predictions or decisions.
- Deep Learning (DL):
Deep learning is a subfield of ML that uses neural networks to process and analyze complex data. DL algorithms are capable of undertaking tasks like image and speech recognition, automatically identifying patterns and features within the data.



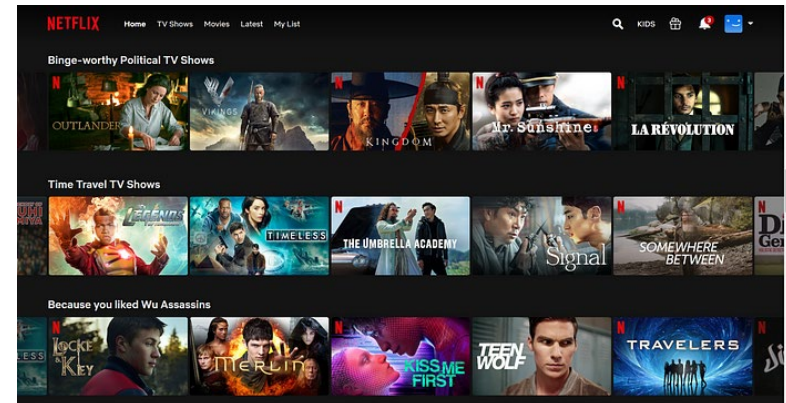
Data Science v. AI v. Machine Learning

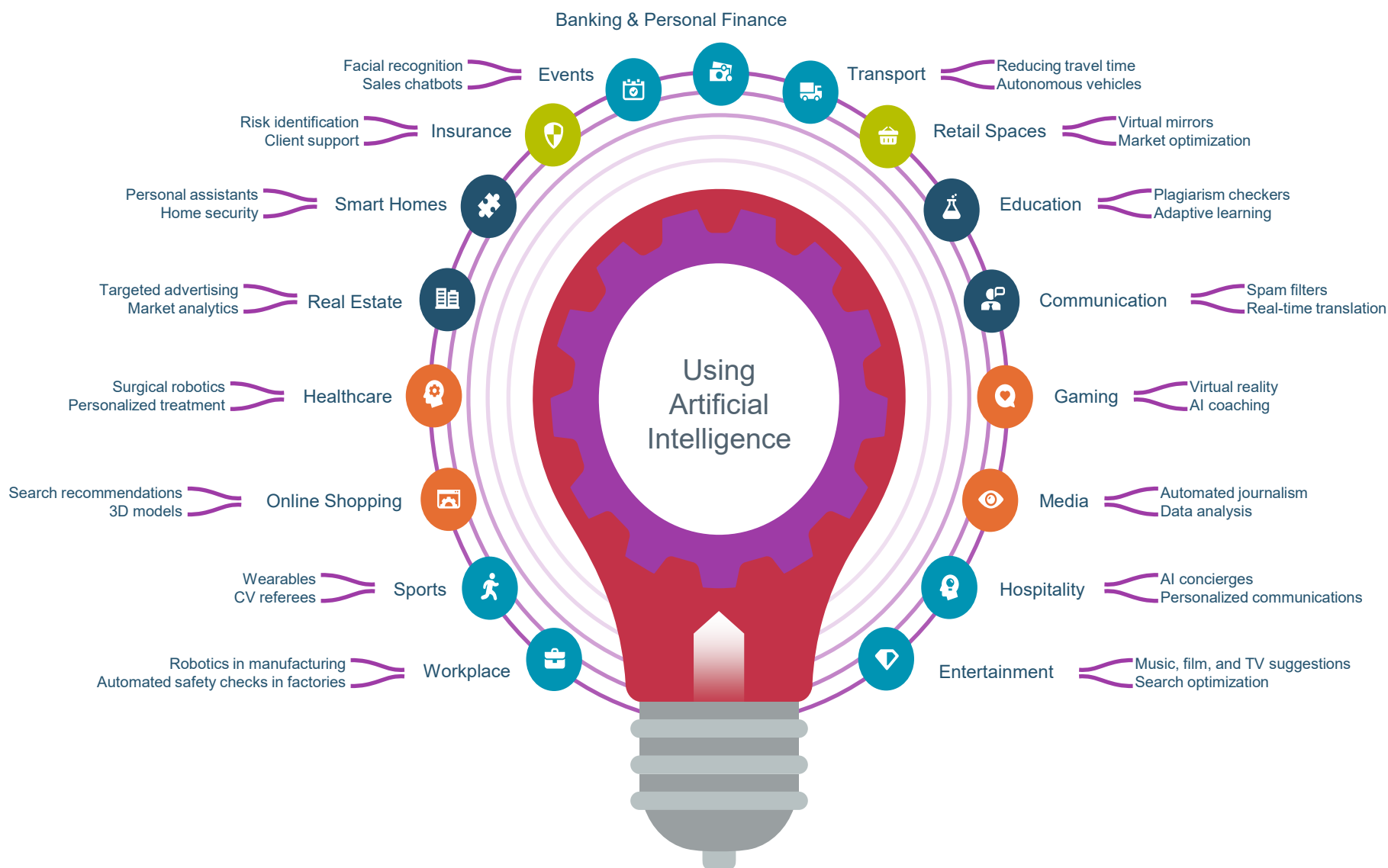
	Definition	Type of Data	Tools	Technique	Application
 Data Science	Data science is used for analytical data sourcing, cleaning, processing, and visualization.	Data science uses structured and unstructured data for analytics.	Tableau, SAS2, Apache, MATLAB, Spark, etc.	Classification and regression analysis, among others.	Fraud detection, healthcare, BI analysis, etc.
 Artificial Intelligence	AI combines iterative processing and intelligent algorithms to imitate human/animal logic and behavior.	AI uses decision trees and logical theory to find the best possible solution to the given problem.	Some of the popular libraries to run AI algorithms include Keras, Scikit-Learn, and TensorFlow.	AI includes predictive modeling to predict events based on previous and current data.	Chatbots, art generators, voice assistants, weather prediction, etc.
 Machine Learning	ML, a type of AI, uses mathematical models to empower a machine to learn with or without regular programming.	ML uses statistical models and neural networks to train a machine.	Amazon Lex2, IBM Watson, and Azure ML Studio.	Machine learning is a subset of AI.	Online recommendations, facial recognition, NLP, etc.

Existing Examples of AI



Predictive text; tap a suggestion to apply.

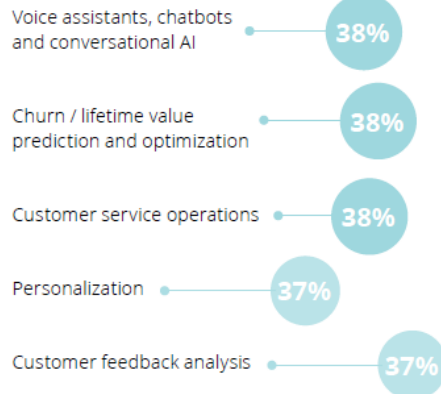




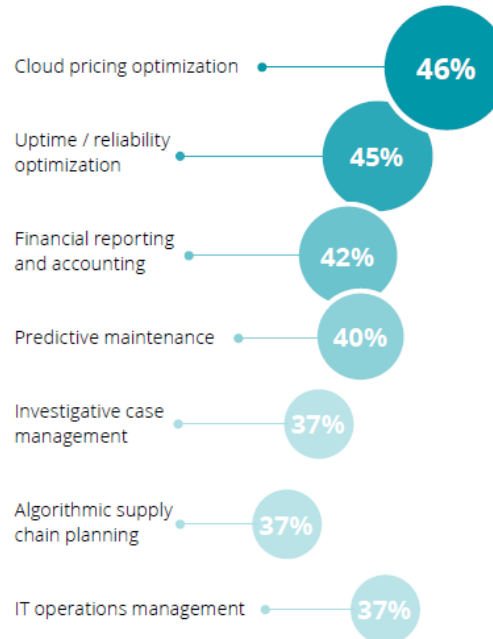
Use of AI: Energy, Resources, & Industrials

Processes currently using AI in operational / day-to-day use (Top 15)

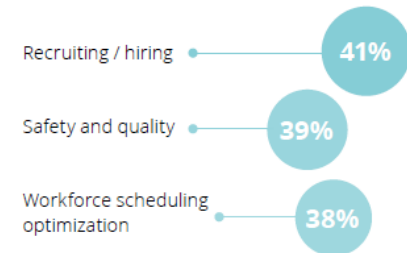
Customer experience & Marketing



Operations & Finance




Workforce & HR



ER&I (N=525)

Fueling the AI Transformation: Four Key Actions Powering Widespread Value From AI, Right Now, Deloitte (2022)

The background of the slide is a vibrant blue with abstract, flowing, and layered geometric shapes that create a sense of depth and movement. A solid white horizontal band runs across the middle of the image, providing a clean space for the text.

Why Are We Talking About AI Today?

AI Risk Hot Topics

- Privacy & Confidentiality Concerns
- **Cybersecurity Concerns**
- Bias Concerns
- **Accuracy Concerns**
- Transparency Concerns
- IP Concerns
- Ethical Concerns
- ESG Concerns
- AI Literacy Concerns
- **Regulatory Concerns**

AI in Plumbing Examples: PipeInsights™

pipe•insights™

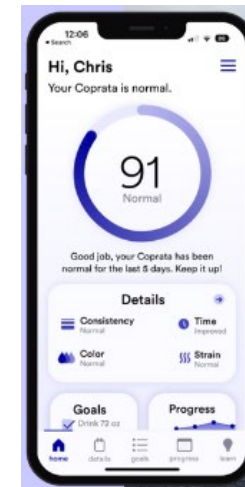
AI/ML technology to improve the speed and accuracy of sewer inspection programs.



AI in Plumbing Examples: Coprata Smart Toilet

Meet Coprata: The Actually Smart Toilet

- Looks and functions just like your existing toilet
- Measures key digestive health indicators - making daily data accessible
- AI personalized tracking, actionable feedback, and 1:1 support



Stop flushing away
valuable health
data.

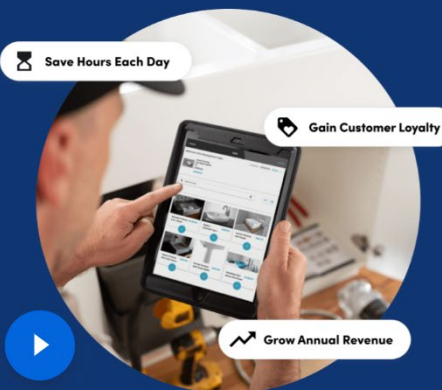
AI in Plumbing: Software

PLUMBING SOFTWARE

Drive sales with more-efficient plumbing software.

The world's leading all-in-one software for residential and commercial plumbing companies.

[Get Demo](#)



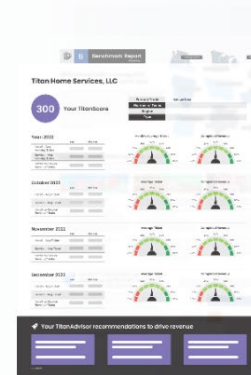
Save Hours Each Day

Gain Customer Loyalty

Grow Annual Revenue

Powered by Titan Intelligence

Ads Optimizer
 Job Value Predictor
 Second Chance Leads
 Price Insights
[Benchmark Report](#) →
 Review Response Generator
 Service Summary Generator
 Invoice Email Generator
 Risky Driver Detection



Quarterly report which compares key metrics of your business to businesses like yours and gives you data-driven insights on where you can make improvements.

The image features a central white rectangular area containing the text "Q&A". This central area is framed by two horizontal bands of a blue abstract pattern. The pattern consists of overlapping, semi-transparent geometric shapes in various shades of blue, creating a dynamic, layered effect. The text "Q&A" is rendered in a dark grey, sans-serif font, positioned on the left side of the white band.

Q&A

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