Use Cases

Please prepare a **90-second spotlight presentation** for one of the use cases listed below (topics with a (*) are recommended). You can use the template below for the presentation or prepare some slides.
Please let me know if one of the links stops working!

- (*) ALCEMY – Optimize cement production
  [DE] | [EN]
- (*) AMAZON – Amazon Fresh strawberry selection
  [EN]
- (*) AUVISUS – Intelligent cash registers
  [DE] | [EN] | [SWR-Artikel]
- BAYER – Speed up plant breeding
  [EN]
- BOSCH – Modeling a physical system for system control and calibration
  [EN]
- (*) BOSCH – Predictive maintenance for lifts
  [DE] | [EN]
- BOSCH – Reduce CO2 with better use of renewable energy
  [DE] | [EN]
- (*) DEEP MIND – Improve data center cooling efficiency
  [EN]
- (*) FESTO – Avoid expensive breakdowns caused by malfunctioning pneumatic valves
  [DE] | [EN]
- i2X – Real time conversation analytics and coaching
  [DE] | [EN] | [WiWo-Artikel]
- ROLLS ROYCE – Predictive maintenance
  [EN]
- SIEMENS – Learn optimal control strategy (for heating and possibly gas turbines)
  [DE]
- (*) SIEMENS – Improve plant operation through data-driven decision making
  [EN]
- (*) TESLA – Develop fully-self-driving vehicles
  [EN]
- (*) ZALANDO – Creating individual outfits
  [DE] | [EN]

Presentation Template

Problem Overview

Situation / Problem / Goal (feel free to add an image!)

Value Generation (i.e., how the company makes or saves money with this)

- ☐ internal process optimization
- ☐ improves existing product
- ☐ new product / SaaS
- ☐ other:

Solution Outline

1 Data Point

- ➔ Input:
  - ☐ structured data
  - ☐ unstructured data
- ➔ Output:

Type of ML Solution

- ☐ Model that produces a specific output given the input (→ supervised learning)
  → Type of model (depends on desired output):
  - ☐ regression
  - ☐ classification
  - ☐ other:

  → Optional extras?
  - ☐ understand root causes
  - ☐ find optimal inputs
- ☐ Identify naturally occurring groups in the data (→ clustering)
- ☐ Identify unusual events in the data, e.g., for monitoring purposes (→ anomaly detection)
- ☐ Generate personalized recommendations or improve search suggestions (→ recommender systems)
- ☐ Find optimal sequences of actions, e.g., for complex robot movements (→ reinforcement learning)
- ☐ Other: