Exercise XP

**🌟 Exercise 1 : Identifying Data Types**

Below are various data sources. Identify whether each one is an example of structured or unstructured data.

* A company’s financial reports stored in an Excel file. structured
* Photographs uploaded to a social media platform. unstructured
* A collection of news articles on a website. unstructured
* Inventory data in a relational database. structured
* Recorded interviews from a market research study. Unstructured

**🌟 Exercise 2 : Transformation Exercise**

For each of the following unstructured data sources, propose a method to convert it into structured data. Explain your reasoning.

* A series of blog posts about travel experiences.
  + Create numeric categories for the type of activities
  + Split experiences per day
* Audio recordings of customer service calls.
  + Split by date, type of call, person that answered the called, outcome positive or negative aka 1 or 0
* Handwritten notes from a brainstorming session.
  + Take a picture, let the handwriting be recognized by a ML algorithm
* A video tutorial on cooking.
  + Use AI for creating a transcript. Then structure data based on content

**🌟 Exercise 3 : Application Scenario**

You are a data analyst at a retail company. You have access to various data sources, including transaction records, customer feedback comments, social media posts about your brand, and employee work schedules.

* Categorize each of these data sources as structured or unstructured.
* Suggest how you might use each type of data for improving the company’s business operations.