* 1. **Data vs Metadata**

**Basic Definitions**

* **Data**: The **raw facts or values** that represent real-world objects, events, or conditions. This is what organizations analyze, process, and make decisions on.
* **Metadata**: **Data about data**. It describes, defines, and gives context to data so users and systems can understand and use it properly.

**Why the Difference Depends on Organizational Requirements**

While metadata and data are conceptually distinct, **whether something is treated as metadata or data often depends on the organization’s purpose** for using it.

**1. Purpose-Driven Perspective**

| **Use Case** | **What is Data?** | **What is Metadata?** |
| --- | --- | --- |
| Business Analytics | Sales transactions, revenue figures | Column names, data types, definitions of KPIs |
| Document Management | Contracts, reports | Author, creation date, document category |
| Healthcare Reporting | Patient records, test results | Data source, unit of measure, diagnosis code labels |
| E-commerce Search | Product listings | Categories, filters, product attributes |

**Interpretation**:  
What one team treats as metadata (e.g., category or product type), another team may treat as core data—depending on their analysis needs.

**2. Source and Structure Matters**

The **source** of information also shapes whether it’s metadata or data.

**Example:**

* A table containing:
  + customer\_id
  + email
  + date\_of\_birth

In the **customer database**, these fields are **data**.  
In a **metadata repository**, descriptions of these fields (e.g., “customer\_id is a unique identifier”) are **metadata**.

**3. Context and Layering**

Metadata can become data in another context.

**Example**:

* In a **data catalog**, the entry:
  + Table: sales\_qtr\_2023
  + Description: “Sales data for Q1 2023”
  + Owner: Finance team

This is **metadata** describing the dataset.

But if you're building a catalog system and analyzing **how often data is accessed**, then that metadata (access logs, ownership details) becomes **data** in your analytics.

**4. Organizational Focus**

The line between data and metadata **blurs** depending on:

* The organization’s **maturity level** in data governance
* Whether the focus is on **analytics**, **compliance**, or **operations**
* Whether metadata is treated as a **strategic asset** or a **technical byproduct**