# The Modern Data Stack

*Seven layers, each dependent on the reliability of the layers beneath it. Get the foundation right before investing above it.*

*Each layer depends on the ones below*

| | | | |
|---|---|---|---|
| 7 | **Activation & AI** | Data drives decisions: marketing automation, personalisation, predictive models and AI recommendations. | *Marketing automation, predictive models* |
| 6 | **Identity & CDP** | Customer data from every source unified into one persistent record, ready to activate. | *Salesforce Data Cloud, Segment, Tealium, Adobe RT-CDP* |
| 5 | **Analytics & BI** | Modelled data turned into dashboards, ad-hoc queries and scheduled reports. | *Power BI, Looker, Tableau* |
| 4 | **Transformation** | Raw data cleaned, modelled and shaped into forms teams can use. | *dbt, SQL-based models* |
| 3 | **Storage** | The central repository where collected data lands. | *BigQuery, Snowflake, Redshift* |
| 2 | **Collection & Ingestion** | Infrastructure that reliably captures events from every source. | *SDKs, tags, APIs, connectors* |
| 1 | **Sources** | Every place data originates. | *CRM, apps, web, in-store, WhatsApp, ad platforms* |

**Activation & AI**

**Analytics infrastructure**

**Foundation**
**Build first**

Source: [Making Sense of Your Data Stack]

# Map your data stack

*Add the tools you use in each layer and mark how solid each one is. Gaps low in the stack matter most.*

*Each layer depends on the ones below*

| | | | | |
|---|---|---|---|---|
| 7 | Activation & AI | *Your tools in this layer* | *In place / Partial / Missing* | Activation & AI |
| 6 | Identity & CDP | *Your tools in this layer* | *In place / Partial / Missing* | |
| 5 | Analytics & BI | *Your tools in this layer* | *In place / Partial / Missing* | Analytics infrastructure |
| 4 | Transformation | *Your tools in this layer* | *In place / Partial / Missing* | |
| 3 | Storage | *Your tools in this layer* | *In place / Partial / Missing* | Foundation Build first |
| 2 | Collection & Ingestion | *Your tools in this layer* | *In place / Partial / Missing* | |
| 1 | Sources | *Your tools in this layer* | *In place / Partial / Missing* | |

*Source: Making Sense of Your Data Stack*

# About this diagram

*The Modern Data Stack*

## When this fits

- Leadership and data teams deciding where the next data investment should go.
- Explaining to non-technical stakeholders why a CDP or AI project depends on unglamorous foundation work.
- Auditing an existing stack for gaps and duplicated tools.

## When it doesn't fit

- Choosing between specific vendors. The layers show where a tool sits, not which tool is best.
- Very small businesses where one or two tools cover several layers. The layers still apply, but mapping them adds little.

## How to use this file

- Every element is a native PowerPoint shape: edit the text, recolour it, or delete what you don't need.
- Use the blank template slide (the one headed Map your or Plan your) to fill in your own version.
- Copy the diagram straight into your own deck. It is sized for a standard widescreen slide.

*Source: Making Sense of Your Data Stack*