

Data Warehouse or House of Cards? How to Tell If You Need a Data Warehouse. The Answer Might Surprise You.

Taj Carson, CEO Adam Sulier, Senior Data Consultant

Data. Driven.

Presentation Overview

WHO WE ARE Meet Adam and Taj

DATA WAREHOUSES & REPORTING PROBLEMS Why a warehouse & what are your options

DATA WAREHOUSE DECISION TREE A decision-making tool

USING THE TOOL...

You try it!

Who Are We







Adam Sulier Senior Consultant & Data Engineer

Data Warehouses & Reporting Problems



People often turn to warehousing because they can't get the reports they need...

- Inputs
 - Siloes (and their policies)
 - Best-in-class systems
 - Data governance
- Data processing
 - Data transformations are more than your BI tool can handle
- Outputs
 - Use across departments
 - Frequency of reports
 - Have you defined what the outputs are from the data warehouse?

Deciding Where Your Data Should Live

Good reasons to think about what the best home for your data include:

- Lots of data in lots of places
- Security challenges
 - Access (and IAM management) needs that are complex
- The need to transform data in complex ways
- The need for a single source of truth
- As a place to pull reports or connect a BI tool

So What Are Your Options?



Spreadsheets:

- What makes it a spreadsheet or flat file?
- What are spreadsheets best for?
- Advantages and Disadvantages
- What processes (or level of data maturity) do you need to have in place to take advantage of a spreadsheet?

Relational Databases:

- SQL on Prem vs Cloud
- Advantages and disadvantages
- When might an RDS best suit your needs, and when might you need to go to a data warehouse?

Data Warehouses:

• What is a Data Warehouse?

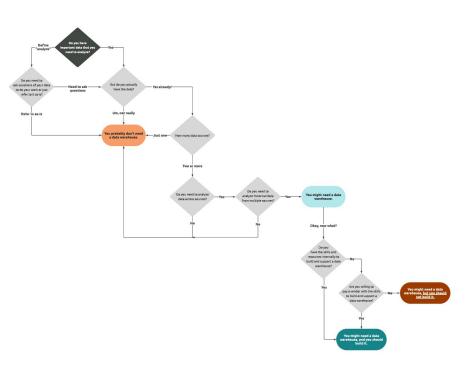
• AWS, GCP, Azure

- What processes (or level of data maturity) do you need to have in place to take advantage of a data warehouse?
- Advantages and disadvantages

Data Lakes:

- What is a Data Lake?
- Advantages and disadvantages

Data Warehouse Decision Tree



Organizational Questions

Do you have important data that you need to analyze?

Organizational Questions

Do you need to ask questions of your data to do your work or just refer to it as-is?

Organizational Questions

But do you actually have the data?



Data Questions



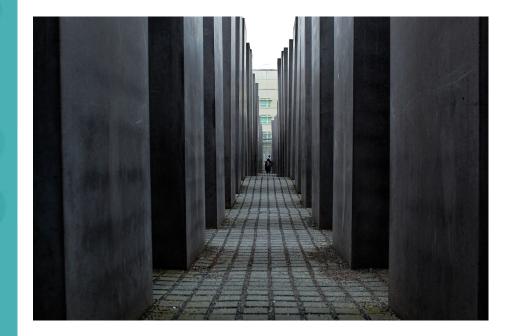
Data Questions

Do you need to analyze data across sources?

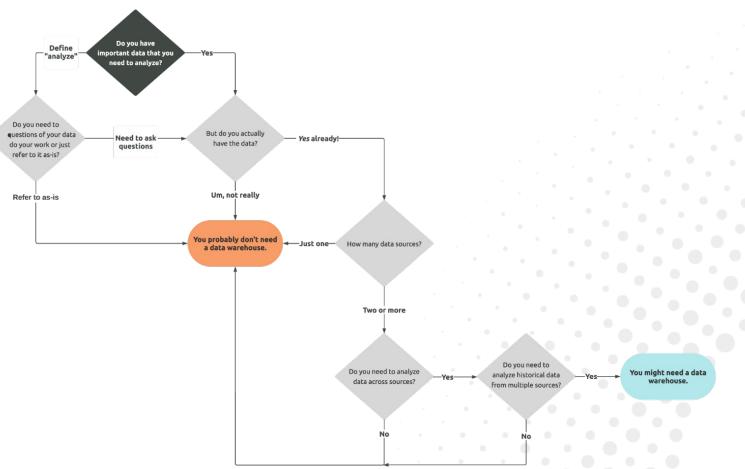
Data Questions

Do you need to analyze historical data from the multiple sources?

You Try It... Using the Tool



The Tool - Part 1



Discuss....

You Might Need a Data Warehouse...

BUT... should you build it?

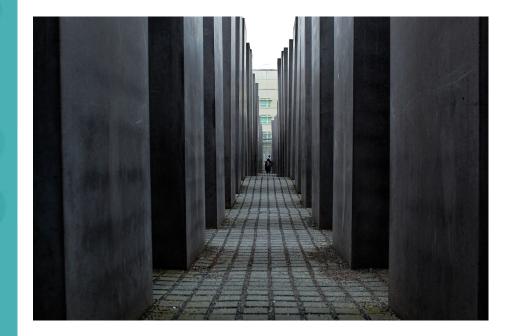
Should You Build It?

Do you have the skills internally to build and support a data warehouse?

Should You Build It?

Are you willing to pay a vendor with the skills to build and support a data warehouse?

You Try It... Using the Tool



The Tool - Part 2



Exceptions

- I only have one data source...
 - ...but it is a monster.
- I don't need to connect my data sources...
 - ...but my team thinks we're missing something.
- We don't have historical data...
 - ...**yet**.



How to Support Your Data Warehouse

- Pay attention to data quality
- Be clear on roles and responsibilities
- Manage access on a regular basis
- Keep in mind that it will grow and change by design

What to think about when choosing your Data Warehouse Tool

- Where is your team the most comfortable?
 - Microsoft Azure
 - Amazon AWS
 - Google GCP

Get in Touch with Us!

- <u>Schedule</u> a FREE Consultation
- <u>Sign-up</u> for our Newsletter!
- <u>View</u> our Explainer Video



Thank you!

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