



# Analytics Governance With Tableau Data Management

Presented By:  
James Chen – Tableau Solutions Engineering

# Today's Agenda

1. Discuss Analytics Governance in Practice Today
2. Overview of Tableau's Data Management Toolset
3. Solving 8 Governance Challenges With Data Management
4. Next Steps and QA

# Looking Back

These conversations have been going on for decades

By [Andrew White](#) | January 20, 2009 | 2 Comments

[Product Information Management \(PIM\)](#)

[IBM](#)

[Customer Data Integration \(CDI\)](#)

I was sent a link to a story in December, [Winning over the MDM Chief Procurement Officer with MDM](#), (thanks Debbie) that I found interesting. The article is based on some vendor ([Bristlecone Inc.](#)) content (not always a bad thing), but the thing that I found most interesting was the source link referred to in this article (see [Avoiding the Big Bang Backlash of MDM Implementations](#)). Jessie Chimni, VP of North American Services for Bristlecone, wrote in his source article that MDM consisted originally of Product Information Management, and Customer Data Integration. Now why would I find this interesting?

[https://blogs.gartner.com/andrew\\_white/2009/01/20/where-did-mdm-%E2%80%9Ccome-from%E2%80%9D-in-the-first-place/](https://blogs.gartner.com/andrew_white/2009/01/20/where-did-mdm-%E2%80%9Ccome-from%E2%80%9D-in-the-first-place/)



# Many of the Same Challenges Persist

## Defining the Conflict

For any business, speed and scale are necessary for success. Business users are driven by the "power of *now*" -- they expect contextual, timely, and comprehensive data instantaneously in order to use business intelligence to make good decisions. For IT, however, matters are not as simple. Issues of governance, security, access control, backlogs, and cost play a large role in IT -- and legitimately so.

From: <https://tdwi.org/articles/2017/08/22/biz-all-agility-and-governance-in-harmony.aspx>

## Common Challenges:

- We need more data
- We need different data
- We need data faster
- *We need to experiment with the data\**

## Business Agility Vs Data Governance





DATA + ANALYTICS  
DEMANDS



DATA  
PRACTITIONERS



# How a Data Practitioner Feels

# Traditional Approaches Add Hurdles- What Could Go Wrong?



## Added Labor:

- Approvals, CAB Review, Change Mgmt
- QA/Certification
- Policy Adherence
- Definitions & Dictionaries
- Data Centralization Requests
- Environmental Promotions

# It's Hard to Recover From a Bad Experience with Governance



## When the Business Faces:

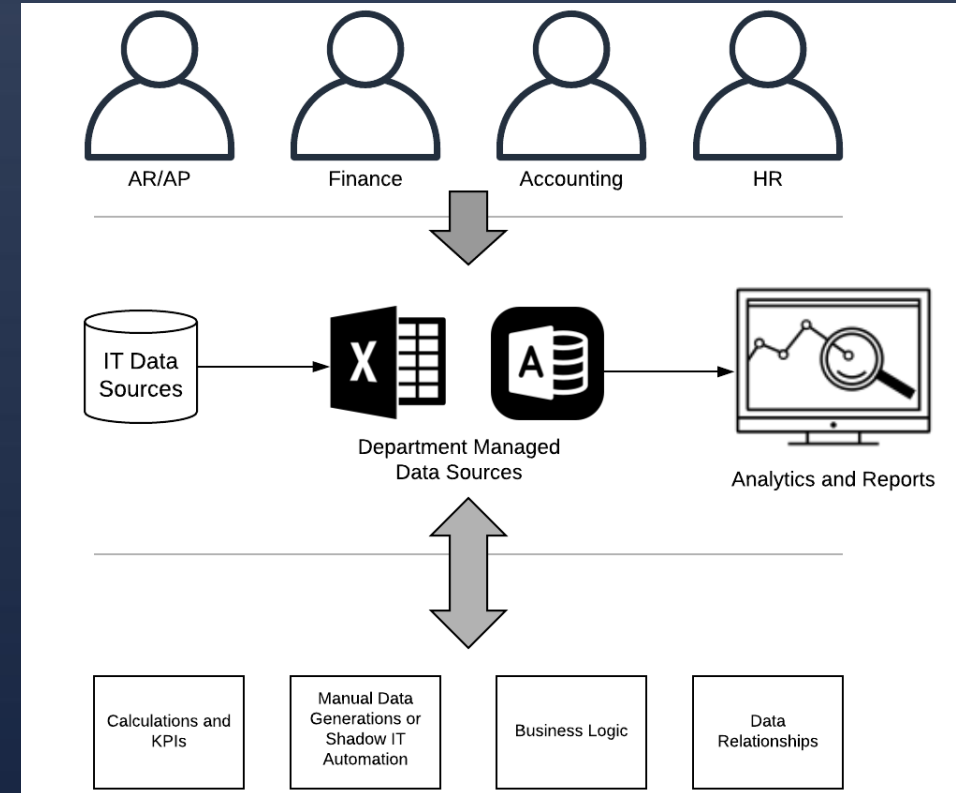
- Overly restrictive governance
- Missed deadlines
- Cumbersome processes
- Arbitrary mandates
- Slow data delivery velocity

**They will find another way...**

# Which Leads to Ungovernable Practices

- Ungoverned spreadsheets + user-operated databases
- Untraceable data curation/preparation
- Ultimately - shadow operations

## Practical Reality of Departmental Analytics

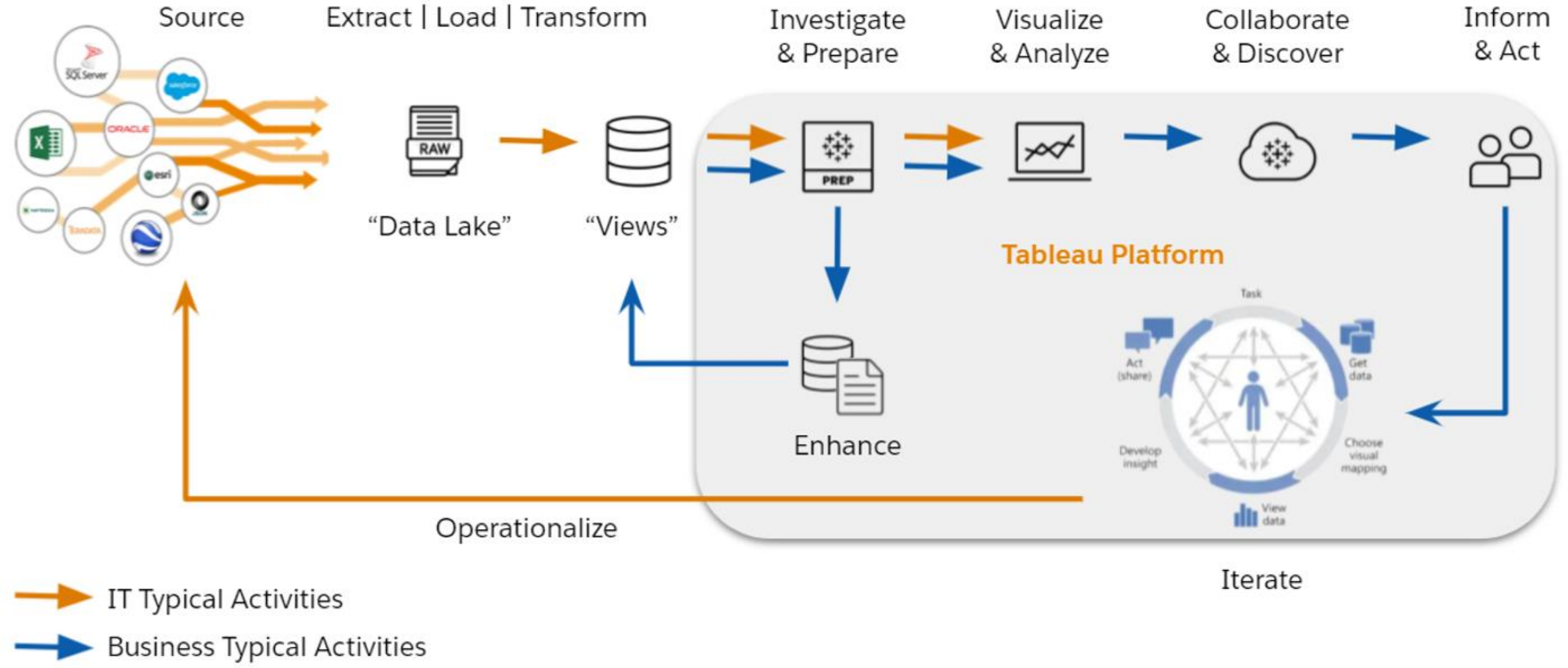




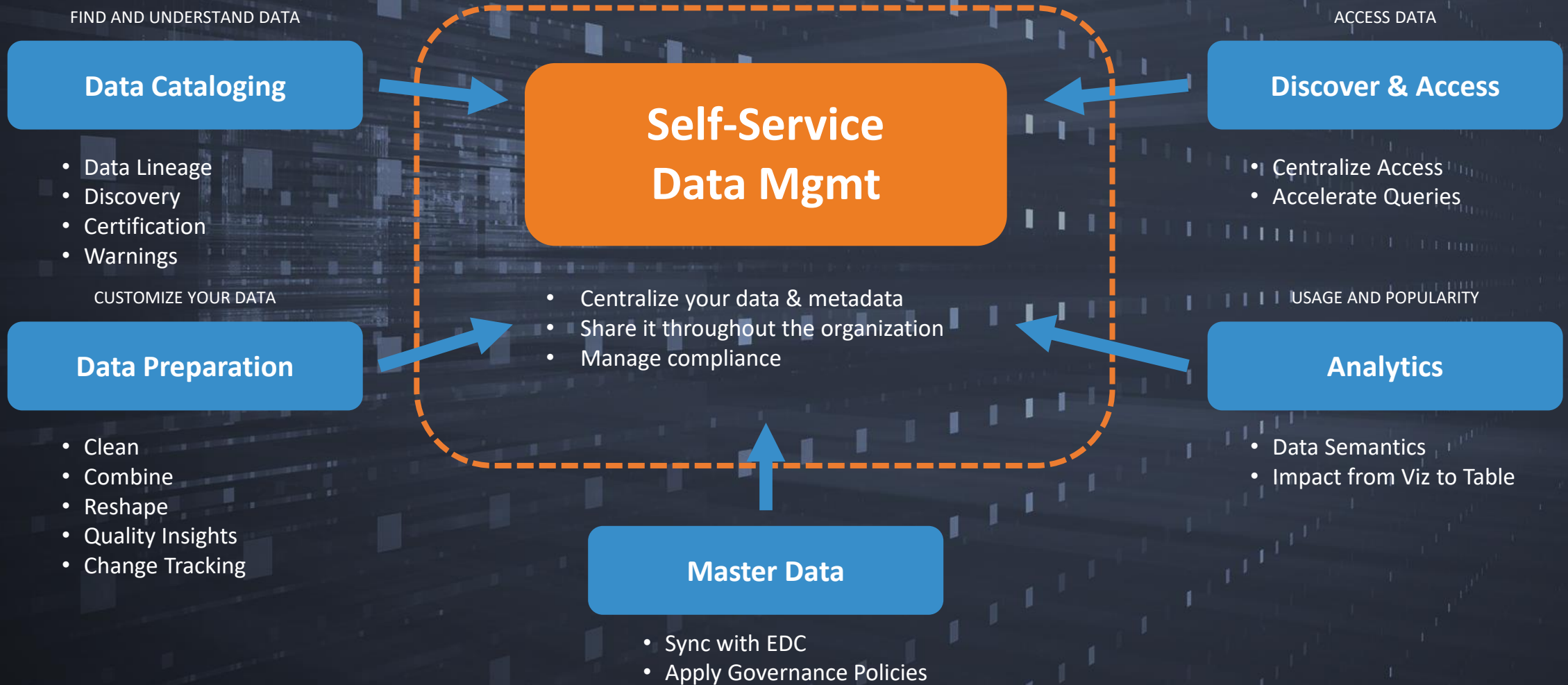
# Tableau's Governance Framework has Changed the Paradigm



# Data Delivery Lifecycle Across IT and the Business



# We are Creating a Convergence



# Simplifying the Lifecycle:

Creation → Oversight → Trust

## Verify

Cataloged discoverable data,  
End user trust + empowerment

## Govern

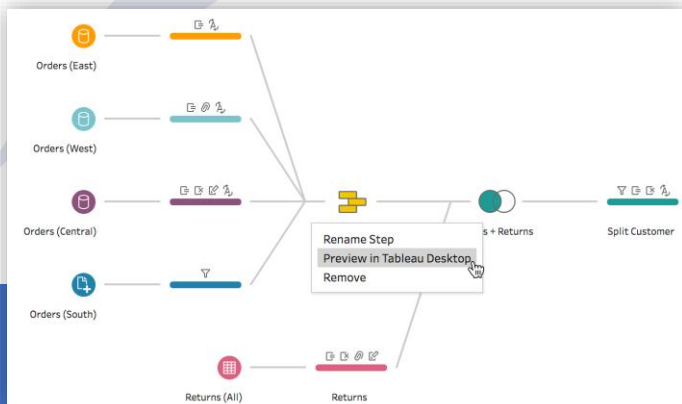
Data is vetted + certified,  
Governance established

## Create

Rapid data development,  
Data wrangled and transformed



## Tableau Prep

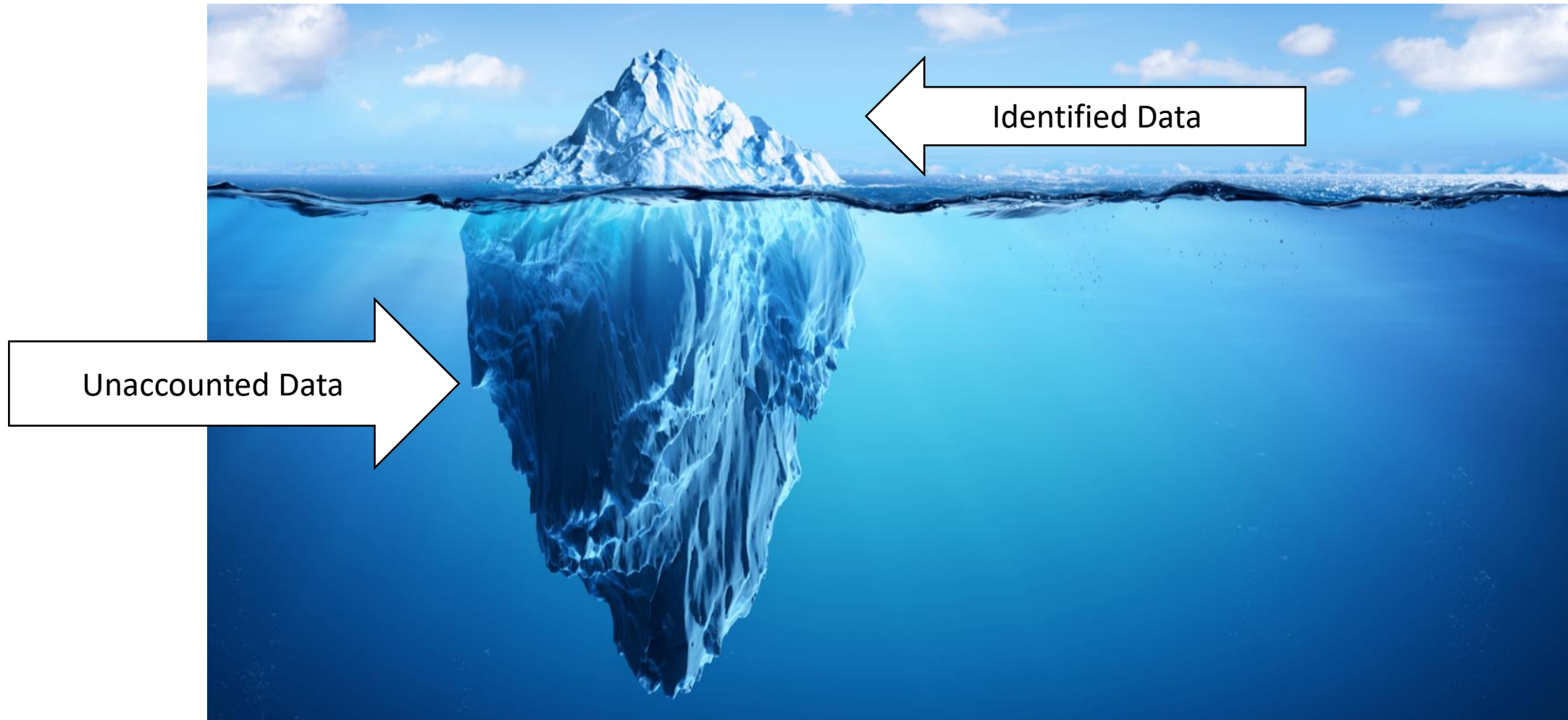


## Catalog + Metadata API



## Data Details

# Challenge 1: The Unknown Data Driving Analytics



# The Spreadsheet Problem



## Widespread Spreadsheet Adoption Leads To:

- Data Quality Challenges
- Instant MSOT
- Broken Chain of Custody
- Lack of Auditability/Traceability
- Decentralization of Data
- Off the Grid KPI's/Business Logic/Automation

# When The Receipts Are No Longer Optional

- Get ALL of your data on the grid – know who did what, when, and where
- Encapsulate your data processes in an auditable/shareable manner
- Repeatable + Reliable + Governable
- Automatic metadata collection



# Prep + Catalog Has the Answers

Where Did The Data Come From?

## Prep Connection Info

**Connection**  
Text file  
Orders\_West.csv [Edit](#)  
Original Table Name: Orders\_West

## Catalog Data Details

Workbook **new version**  
Project **Sales - Sandbox**  
Author **Roman Usatin**  
Modified **Dec 3, 2019, 1:24 PM**  
Warnings **3 data quality warnings**

Data Sources (1)

- Superstore Transactions**

Connects to **Superstore Transactions**  
Last Refreshed **Mar 19, 2020, 12:50 PM**

What Changes Were Made?

## Prep Change Tracking Indicators

Orders + Returns

## Prep Change Details

Settings Changes (8)

- Change Type [Discount] To Number (decimal) type
- Calculated Field [Days to Ship] DATEDIFF('day', [Order Date], [Ship Date])
- Calculated Field [Returned?] IF ISNULL([Return Reason]) = false THEN "Yes" ELSE "No" END
- Remove Field [Table Names]
- Remove Field [File Paths]

Were There Quality Issues?

## Prep Visual Join Results

Join Type: right

Summary of Join Results

|                       | Included | Excluded |
|-----------------------|----------|----------|
| Clean Notes/Approvals | 272      | 3        |
| All Orders            | 16,301   | 0        |
| Join Result           | 16,301   |          |

## Catalog Quality Warnings

**Under maintenance**

**Order.Fact**  
Set by **Colby Pash**  
Aug 20, 2021, 11:16 AM  
The Profit field will be undergoing change on 9/1

## Prep ML Insights

3 Recommendations

- [Postal Code] Change Data Role to ZIP Code/Postcode
- [Region] Change Data Role to NUTS Europe
- [State] Change Data Role to State/Province

How Was the Business Logic Built?

## Catalog Calc Details

**Profit Ratio**

Continuous Number Calculated Field

Description  
No description available.

Calculation  
`sum([Profit]) / sum([Sales])`

[View More](#)

## Prep Indicators

Orders + Returns

- Calculated Field [Days to Ship]
- Calculated Field [Returned?]
- Calculated Field [Discount]
- Calculated Field [Year of Sale]

## Prep Calculation Definitions

Field Name  
**Days to Ship**  
DATEDIFF('day', [Order Date], [Ship Date])

Where Did The Data Go?

## Prep Write to File, Database Table, Tableau Server

Save output to  
File

[Browse](#)

Name  
Superstore Sales

Location  
C:\...\Datasources

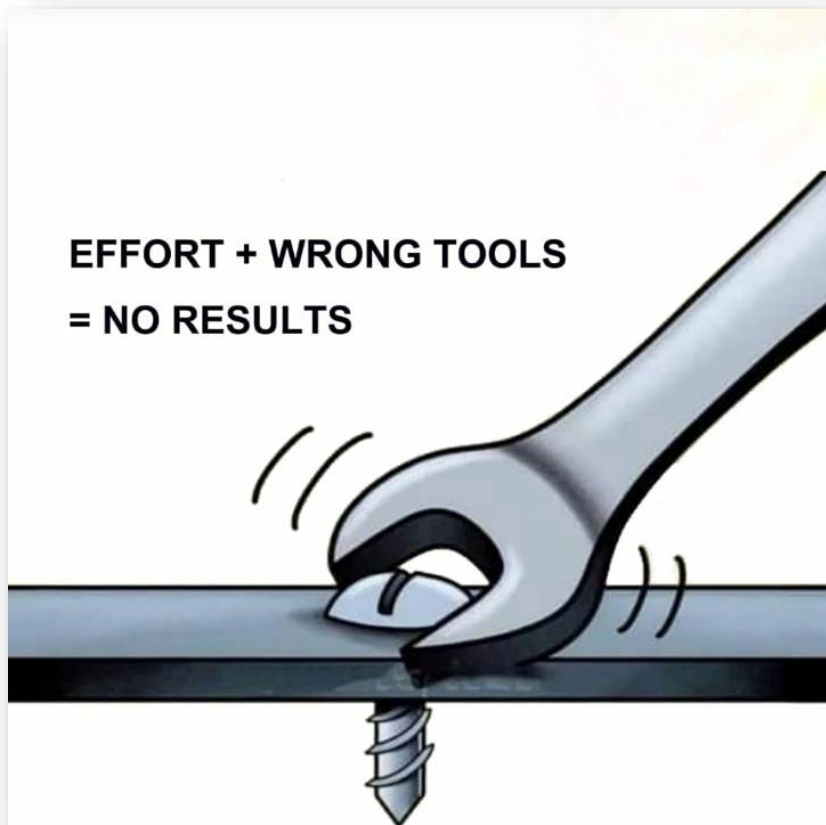
Output type  
Tableau Data Extract (.hyper)

Write Options  
Select an option to create or update your output table.

Full refresh  
Create table



# Challenge 2: Matching Tools with Skillsets



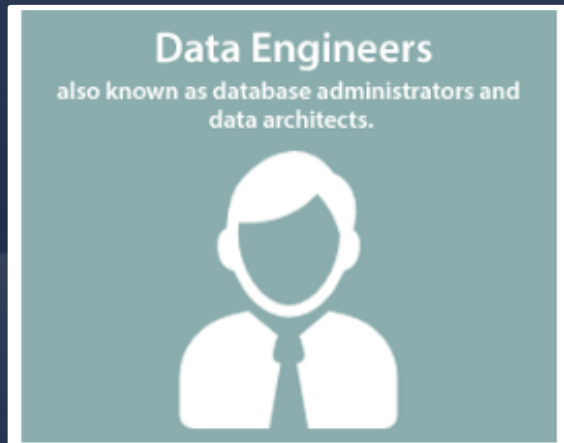
## When the Wrong Tool is Selected

- Adoption fails
- Business goes back to the spreadsheet data economy
- Expensive shelf ware
- The same problems persist

# Most Data Workers are Analysts, Not Engineers

**10.6 Million**

LinkedIn Users with SQL Skills\*



**52.3 Million**

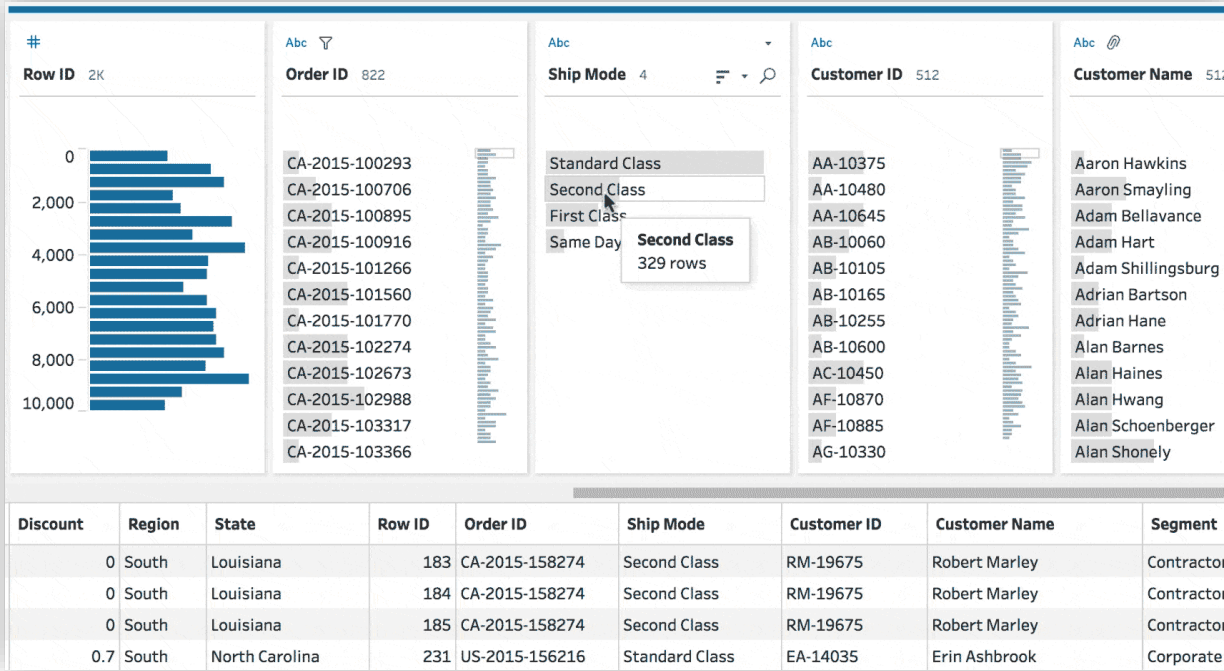
LinkedIn Users with Excel Skills\*



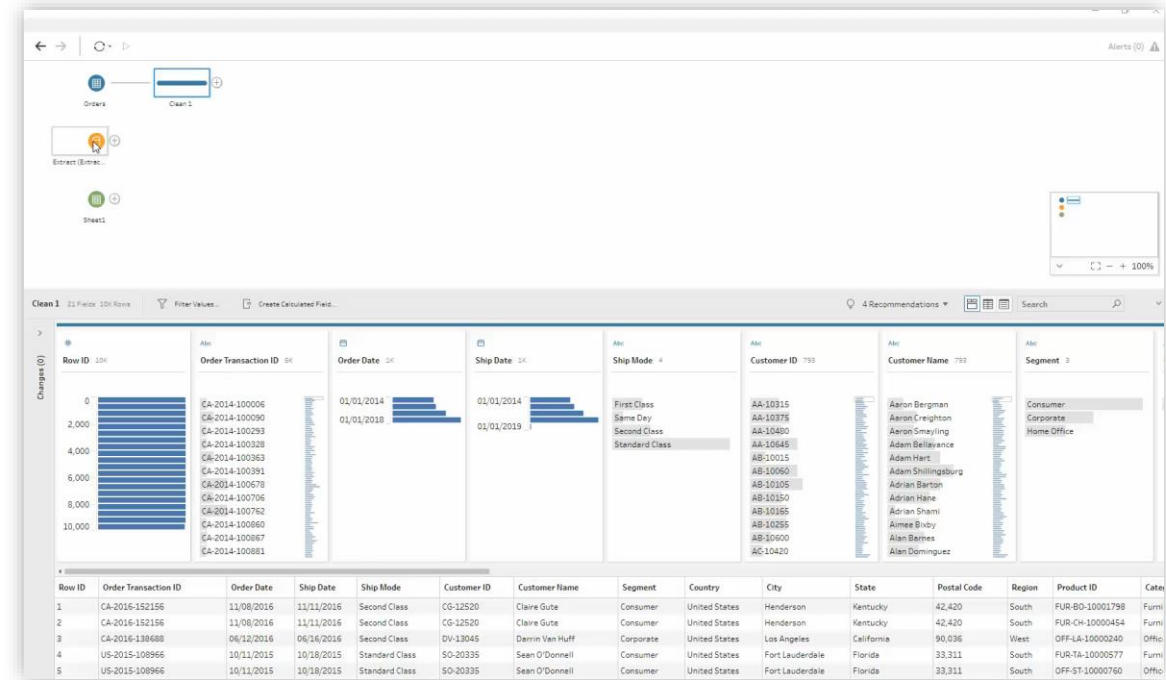
\*As of 7.20.2020

# Prep Builder Makes Self-Service ETL Easy

## VISUAL DATA ANALYSIS



## DRAG AND DROP INTERFACE



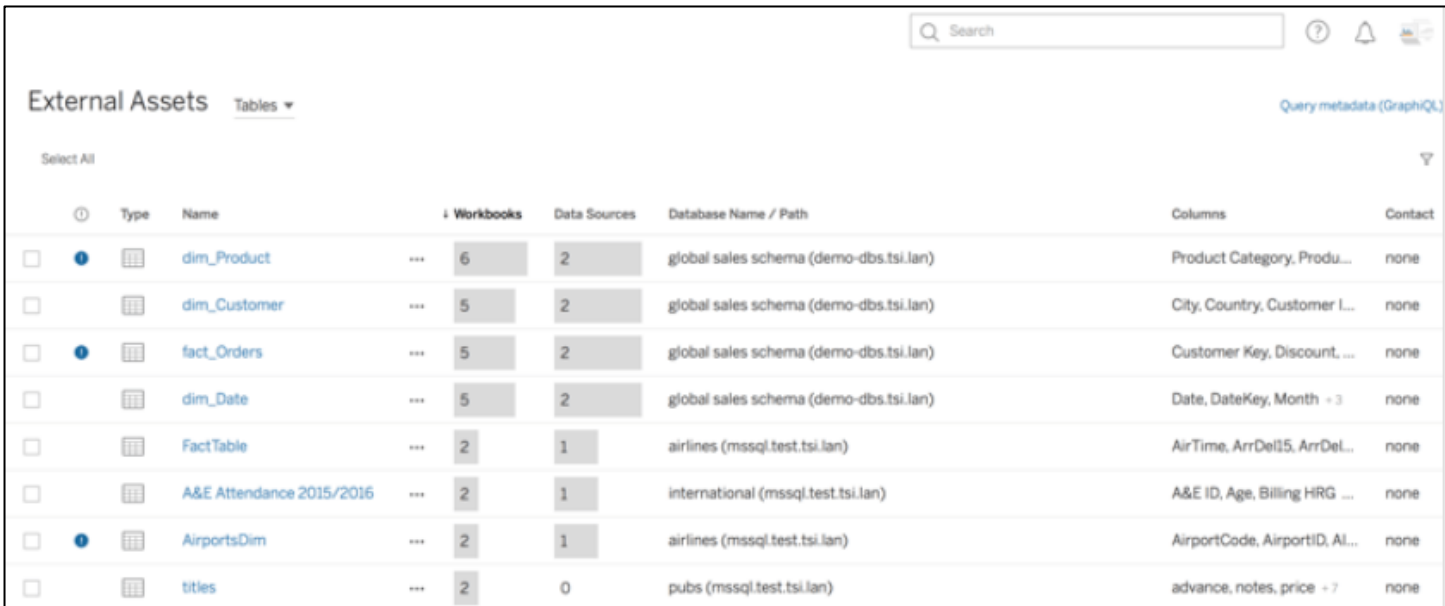
# Challenge 3: Finding the Right Data

- How can I find a dataset created from the proper source of truth?
- How would I know if the source database/table is safe to use?
- How will I know if there are issues on the source databases and tables?
- When there are 20 Sales data sources – how will I know which, one is right?



# Catalog Makes Finding the Right Data Fast and Easy

- Search, Browse, Sort, Filter external + file-based connections
- Automatic ingestion of metadata from Extracts, Live Connections, and Prep Flows
- Observe data source usage, certifications and warnings



The screenshot displays the Tableau Catalog interface. At the top, there is a search bar and navigation icons. Below the search bar, the page is titled "External Assets" with a "Tables" dropdown menu. A "Select All" button is visible on the left. The main content is a table listing various data assets. The table has columns for "Type", "Name", "Workbooks", "Data Sources", "Database Name / Path", "Columns", and "Contact". The assets listed include dim\_Product, dim\_Customer, fact\_Orders, dim\_Date, FactTable, A&E Attendance 2015/2016, AirportsDim, and titles. Each row shows the number of workbooks and data sources associated with the asset.

| Type  | Name                     | Workbooks | Data Sources | Database Name / Path                   | Columns                       | Contact |
|-------|--------------------------|-----------|--------------|----------------------------------------|-------------------------------|---------|
| Table | dim_Product              | 6         | 2            | global sales schema (demo-dbs.tsi.lan) | Product Category, Produ...    | none    |
| Table | dim_Customer             | 5         | 2            | global sales schema (demo-dbs.tsi.lan) | City, Country, Customer I...  | none    |
| Table | fact_Orders              | 5         | 2            | global sales schema (demo-dbs.tsi.lan) | Customer Key, Discount. ...   | none    |
| Table | dim_Date                 | 5         | 2            | global sales schema (demo-dbs.tsi.lan) | Date, DateKey, Month + 3      | none    |
| Table | FactTable                | 2         | 1            | airlines (mssql.test.tsi.lan)          | AirTime, ArrDel15, ArrDel...  | none    |
| Table | A&E Attendance 2015/2016 | 2         | 1            | international (mssql.test.tsi.lan)     | A&E ID, Age, Billing HRG ...  | none    |
| Table | AirportsDim              | 2         | 1            | airlines (mssql.test.tsi.lan)          | AirportCode, AirportID, Al... | none    |
| Table | titles                   | 2         | 0            | pubs (mssql.test.tsi.lan)              | advance, notes, price + 7     | none    |

**A complete view of your data**

Tableau Catalog automatically ingests all of the data assets in your Tableau environment into one central list. No need to set up an index schedule or configure connectivity. Quickly see all your tables, files, and databases in one place.

# The Right Details to Drill Down

Search Results

Showing 503 results for "superstore"

Views 163   Metrics 0   Workbooks 33   Data Sources 61   Flows 46   Projects 0   Tables 37   **Databases and Files 157**   Data Roles 0

Select All

| <input type="checkbox"/> | ⓘ | Type | Name                      | Actions | Workbooks | ↓ Data sources | Server / Path                                  | Connection type             |
|--------------------------|---|------|---------------------------|---------|-----------|----------------|------------------------------------------------|-----------------------------|
| <input type="checkbox"/> |   | 📄    | superstore world          | ⋮       | 4         | 7              | superstore world (db.demo.tableau.com)         | Microsoft SQL Server        |
| <input type="checkbox"/> | A | 📄    | superstore world          | ⋮ B     | 68        | 7 C            | superstore world (demodatabase.c5c9e2pjmpzh D  | Microsoft SQL Server        |
| <input type="checkbox"/> |   | 📄    | Superstore Increment.xlsx | ⋮       | 0         | 2              |                                                | Microsoft Excel (Google ... |
| <input type="checkbox"/> |   | 📄    | superstore                | ⋮       | 1         | 2              | superstore (demodatabase.c5c9e2pjmpzh.us-we... | Microsoft SQL Server        |
| <input type="checkbox"/> |   | 📄    | SUPERSTORE                | ⋮       | 0         | 2              | SUPERSTORE (tableause.snowflakecomputing.c...  | Snowflake                   |
| <input type="checkbox"/> |   |      | superstore                | ⋮       | 7         | 2              | superstore (db.demo.tableau.com)               | Microsoft SQL Server        |
| <input type="checkbox"/> |   | 📄    | Sample - Superstore.xls   | ⋮       | 1         | 1              | Sample - Superstore.xls                        | Microsoft Excel             |

**A- Is the data certified or have a quality warning?**

**B- Is this data source actively in use?**

**C- Where does this data come from?**

**D- What kind of connection is it?**

# Surf the Lineage to Find Existing Assets

Prevent MSOT by finding the data you are looking for using Catalog's relational lineage

Order.Fact ...  
Contact none Certified by James Chen Under maintenance

New Workbook

About

| Database Name    | Connection Type      | Hostname                                  | Full Name          |
|------------------|----------------------|-------------------------------------------|--------------------|
| superstore world | Microsoft SQL Server | demodatabase.c5c9e2jpmph.us-west-2.rds... | [dbo].[Order.Fact] |

Tags  
No tags available.

Description  
No description available.

Columns (9)

| Type                                | Name             | Sheets | Data sources | Description                                 | Tags                   |
|-------------------------------------|------------------|--------|--------------|---------------------------------------------|------------------------|
| <input type="checkbox"/>            | Abc Customer ID  | 1      | 8            | ID for customers 2                          | No tags available.     |
| <input type="checkbox"/>            | # Discount       | 44     | 8            | New Discount Rate                           | gamma.prueba (2 total) |
| <input type="checkbox"/>            | Abc Order ID     | 46     | 8            | This is a unique identifier for orders      | No tags available.     |
| <input type="checkbox"/>            | Abc Product ID   | 2      | 8            | Product Number                              | Hizny (1 total)        |
| <input checked="" type="checkbox"/> | # Profit         | 297    | 8            | Total Revenue - Total Cost (oliver edition) | No tags available.     |
| <input type="checkbox"/>            | # Quantity       | 37     | 8            | How many products have been sold.           | No tags available.     |
| <input type="checkbox"/>            | # Row ID         | 0      | 6            | UID For Rows on the Order Fact Table        | No tags available.     |
| <input type="checkbox"/>            | # Sales          | 330    | 8            | No description                              | No tags available.     |
| <input type="checkbox"/>            | # Salesperson ID | 0      | 8            | No description                              | No tags available.     |

Lineage

- Databases 1/1
- Order.Fact Columns 9 1 column selected
- Flows 2/2
- Data Sources 8/9
- Workbooks 51/64
- Sheets 297/383
- Dashboards 74/83
- Metrics 9/9
- Owners 40/46



Order.Fact ...  
Contact none Certified by James Chen Under maintenance


New Workbook

Downstream Published Data Sources (8)

| Type                                | Name                            | Workbooks | Live / Last extract    | Project                | Owner         |
|-------------------------------------|---------------------------------|-----------|------------------------|------------------------|---------------|
| <input type="checkbox"/>            | Order.Dim+ (superstore world)   | 2         | Live                   | Sales - Production     | Chris Pereira |
| <input type="checkbox"/>            | Order.Fact+ (Superstore World)  | 0         | Live                   | Marketing - Production | Eli Blankers  |
| <input type="checkbox"/>            | Order.Fact+ (Superstore World)  | 0         | Live                   | Sales - Sandbox        | Eli Blankers  |
| <input type="checkbox"/>            | PUBLISHTEST                     | 0         | May 19, 2020, 1:06 PM  | Default                | Andrew Hill   |
| <input type="checkbox"/>            | Superstore Data                 | 0         | Live                   | Sales - Production     | Dora          |
| <input type="checkbox"/>            | Superstore Orders & Salespeople | 0         | Live                   | Sales - Sandbox        | Sammy         |
| <input checked="" type="checkbox"/> | Superstore Transactions         | 57        | Mar 19, 2020, 12:50 PM | Sales - Production     | Eli Blankers  |
| <input type="checkbox"/>            | Superstore with Target          | 0         | Live                   | Sales - Sandbox        | Sammy         |

Lineage Filter: Profit X

- Databases 1/1
- Order.Fact Columns 9 1 column selected
- Flows 2/2
- Data Sources 8/9
- Workbooks 51/64
- Sheets 297/383
- Dashboards 74/83
- Metrics 9/9
- Owners 40/46

 Superstore Transactions

Database → Table → Field → Related Data Sources → Certified Data Source

# Challenge 4: Consolidating the User Experience



Eliminate Swivel Chairing



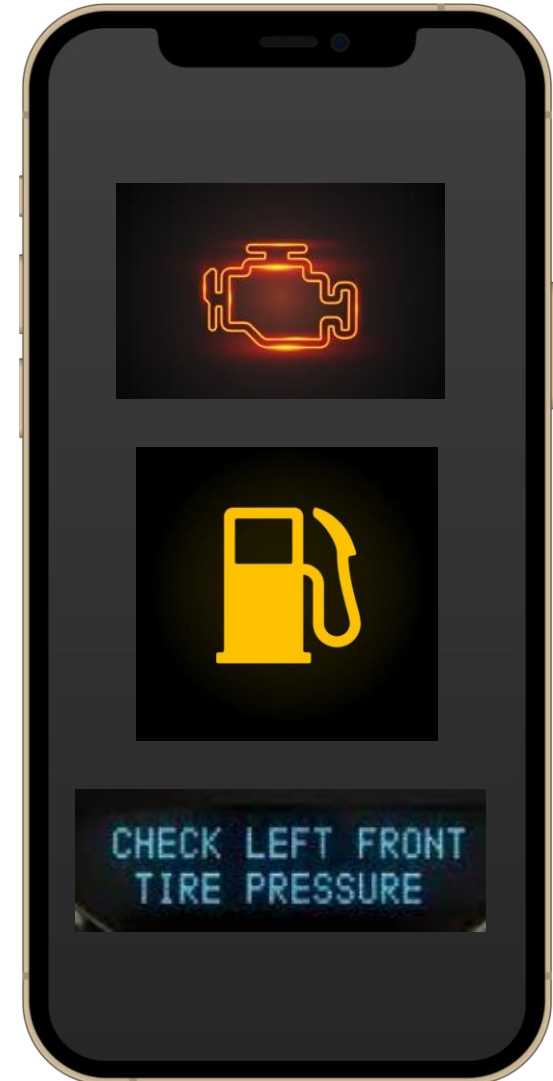


# The Dangers of Disjointed Experiences

## Why is it important to place key information at the point of usage?

*Let's imagine that your vehicle's check engine, TPMS, and low fuel indicators required a separate interface – perhaps a phone app*

- Would you check it every time you drive?
- Would you get run out of gas on the side of the road?
- Would you drive a vehicle that is potentially dangerous to operate?
- How much do these probabilities increase?



# Certifications and Quality Warnings in Tableau

Databases, Tables, and Data Sources can be certified or have a quality warning applied

## Certifying a Data Source

Certification  This data is certified Save Cancel

Users will be able to see that this data source has been certified for use in analysis. It will also be surfaced in search results.

Note (optional)

Add info here about this data source's characteristics that determined its certification status.

## Setting a Quality Warning

Data Quality Warning

2nd level Flow -> PDS

Enable warning

When enabled, the warning you set is visible to users of this asset and of any asset downstream from it. [Learn more](#)

Select the warning to display:

Warning type  
Deprecated

Enable high visibility


When enabled, a notification appears when you open a published view affected by this warning. The warning is also more visible elsewhere in Tableau.

Message (required) Edit Preview




This database is deprecated and will be no longer available starting \*August 1\*. Any dashboards, workbooks, and data sources need to be updated to use the SQL database before then to continue to work. Contact the data steward team or the workbook author for more information.

275 / 4,000

Cancel Save

| To get this                                                                                 | Type this                          |
|---------------------------------------------------------------------------------------------|------------------------------------|
| Link                                                                                        | "Link":http://www.example.com      |
| <b>Bold</b>                                                                                 | "*Bold*"                           |
| <i>Italics</i>                                                                              | _"Italics_"                        |
| <u>Underline</u>                                                                            | +Underline+                        |
|  Image | !http://www.example.com/image.png! |

## Certification Icon and Description

| Ty...                                                                                                        | ↑ Name                                                                                                                                                         | Views ( |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <input type="checkbox"/>  | <b>Certified by Calvin</b>                                                                                                                                     | 1,013   |
| <input type="checkbox"/>  | Live data source connecting to <a href="#">www.example.com</a> repository for Background Tasks admin views (filtered to <a href="#">www.example.com</a> site). | 0       |
| <input type="checkbox"/>  | LIVE CONNECTION                                                                                                                                                | 206     |

# Critical Information At the Point of Consumption

Catalog Puts the Metadata in the Creator and Consumer's Flow

## Data Catalog Within Prep and Desktop

| Type     | Name               | Workbooks | Server / Path                    | Connection Type      | Contact |
|----------|--------------------|-----------|----------------------------------|----------------------|---------|
| Database | DEMO_DB            | 2         | tableau.snowflakecomputing.com   | Snowflake            |         |
| Database | SUPERSTORE         | 2         | tableause.snowflakecomputing.com | Snowflake            |         |
| Database | superstore         | 1         | demo-dbs                         | Microsoft SQL Server |         |
| Database | CITIBIKE           | 1         | tableau.snowflakecomputing.com   | Snowflake            |         |
| Database | TestV1             | 0         | postgres.test.tsi.lan            | PostgreSQL           |         |
| Database | superstore world   | 0         | db.demo.tableau.com              | Microsoft SQL Server |         |
| Database | FINANCIAL_SERVICES | 0         | tableause.snowflakecomputing.com | Snowflake            |         |

| Type     | Name       |
|----------|------------|
| Database | DEMO_DB    |
| Database | SUPERSTORE |

**On this asset**

- Under maintenance
- DEMO\_DB
- Set by Vlad Usatin
- Sep 14, 2020, 9:53 AM
- Last night batch failed

## Search and Filter

Clear all filters

Search for data

Tag

Data Quality Warning: Assets without warnings

Asset Category: All assets

Certified

## Web Authoring From Catalog

superstore world

Contact: Eli Blankers | Certified by: Sammy

New Workbook

About

Hostname: demodatabase.c5c9e2pjmpzh.us-west-2.rds... | Connection Type: Microsoft SQL Server

Tags: PII

Description: Connection to Superstore tables in MS SQL database – use for all commercial reporting

## Data Details on Vizzes

Data Details

Views of this dashboard

Views over last 12 weeks

Workbook: Bob Russell - Superstore Executive Overview

Project: Sales - Sandbox

Author: Mitchell Grewer

Modified: Jul 30, 2021, 11:54 AM

Warnings: 3 data quality warnings

Data Sources (1)

Order.Dim+ (superstore world)

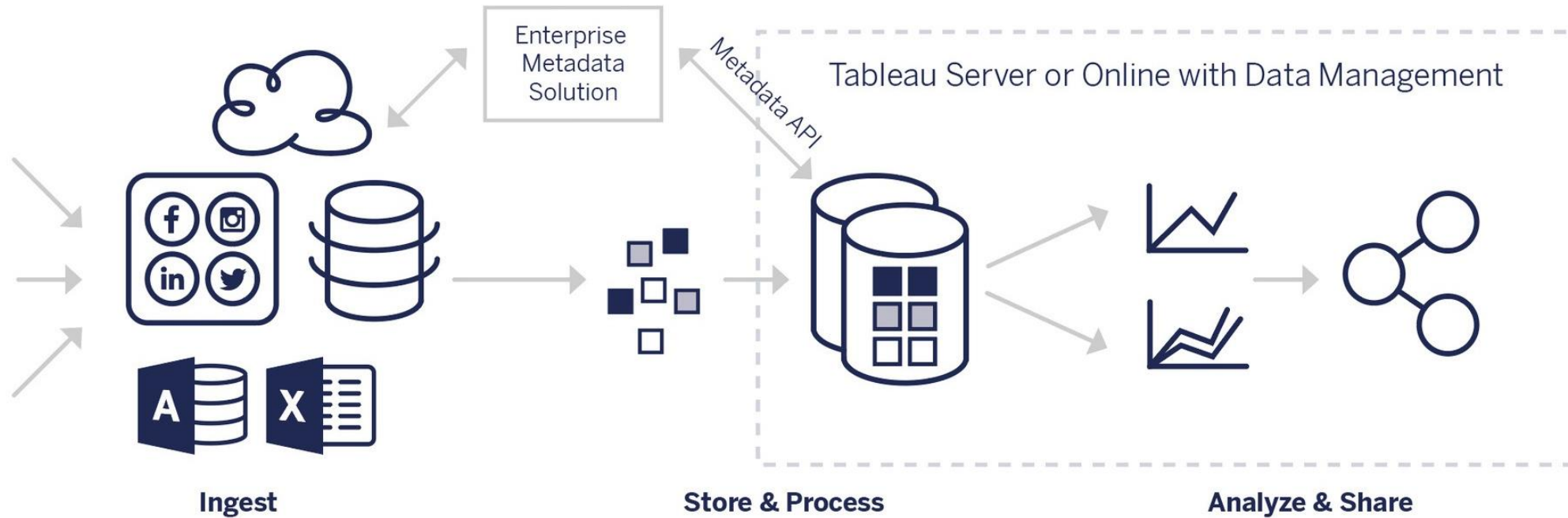
Connects to: Order.Dim+ (superstore world)

Last Refreshed: Live Connection

Fields in Use (16)

- Category
- Discount
- Order Date
- Order Profitable?
- Postal Code
- Profit
- Profit per Order
- Profit Ratio
- Quantity
- Region
- Sales
- Sales Forecast
- Sales per Customer
- Segment
- State

# Challenge 5: Keeping Metadata Synced



# Tableau to EDC Via Metadata API

Collibra (EDC)

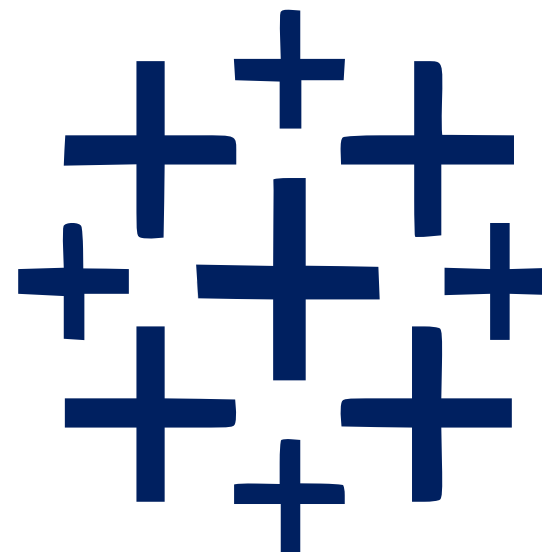


Import Asset  
Definition



Query Assets

Tableau



# EDC Metadata to Tableau Via REST API

Descriptions

Certifications

Data Quality Warnings

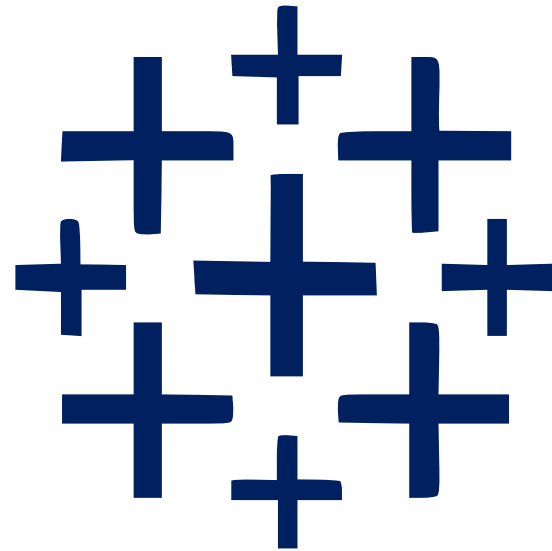
Tags

## Collibra

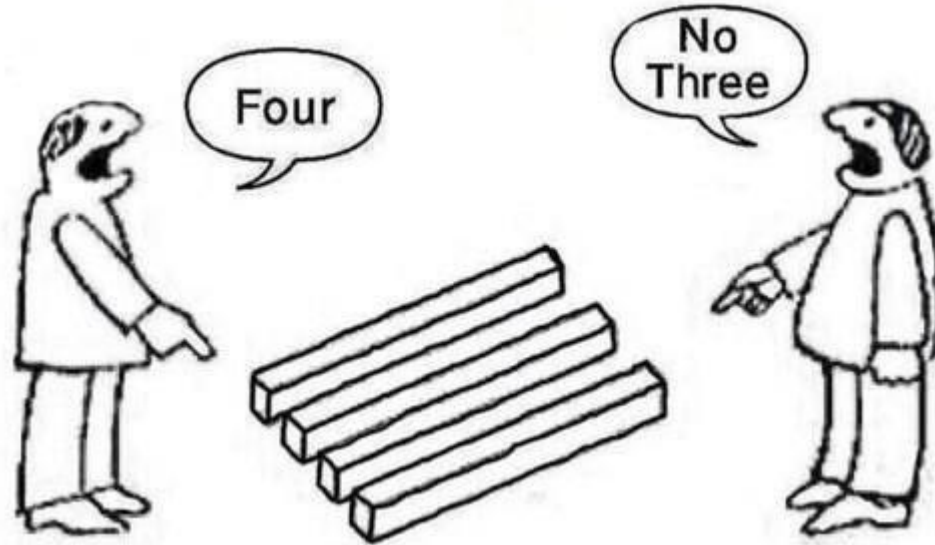


Push Enriched Asset Characteristics

## Tableau



# Challenge 6: Establishing Data Trust



*Do your executives sound like this?*

# Do your users trust what they see?



FEB 28

Say it's February 28.  
WOULD YOU DRINK THIS MILK?

What verification information do you  
provide today?



# Data Details Provides Consumers With the Receipts

Data Details

Views of this dashboard

Views over last 12 weeks

Workbook [Exec Dashboard - ET](#)

Project [Sales - Sandbox](#)

Author [Erik Teutsch](#)

Modified Aug 11, 2020, 6:57 PM

Warnings 3 data quality warnings

Data Sources (1)

[Superstore Transactions](#)

Connects to [Superstore Transactions](#)

Last Refreshed Mar 19, 2020, 12:50 PM

Fields in Use (10)

- [Choose a Metric](#)
- [Choose a Metric \(copy\)](#)
- [Customer Segment](#)
- [high-low points](#)**
- [Index](#)
- [Order Date](#)
- [Region](#)
- [Sales](#)
- [State](#)
- [Sub-Category \(group\)](#)



**Provides consumers all the key details so that they know:**

- Where did this data come from?
- Are the underlying data sources certified?
- Are there Data Quality Warnings on these data sources?
- When was the data last refreshed?
- What fields were used from which tables?
- How were the calculations and KPI's created?

Field details

high-low points

+# Continuous Number Calculated Field

Description *No description available.*

Hidden? No

Data category Quantitative

Data type Real

Role Measure

Formula 

```
IF WINDOW_MAX([Choose a Metric (copy)])  
== [Choose a Metric (copy)] OR  
WINDOW_MIN([Choose a Metric  
(copy)]) == [Choose a Metric (copy)]  
THEN [Choose a Metric (copy)]  
END
```

Has user reference? No

Autogenerated? No

Referenced fields [Choose a Metric \(copy\) \(Superstore Transactions\)](#)

# Challenge 7: Managing Sensitive Data



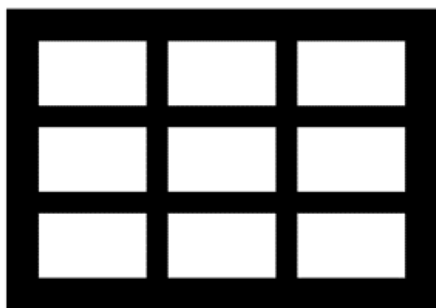
# Mistakes Happen Often With Ungoverned Data



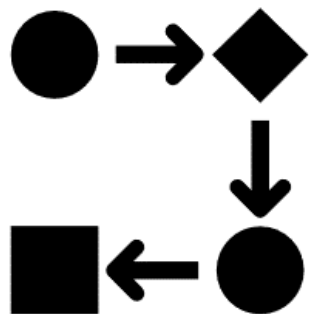
I didn't know that  
data was sensitive!

# Tableau ProServ PII/PHI Data Manager to the Rescue

## PII / PHI Data Manager



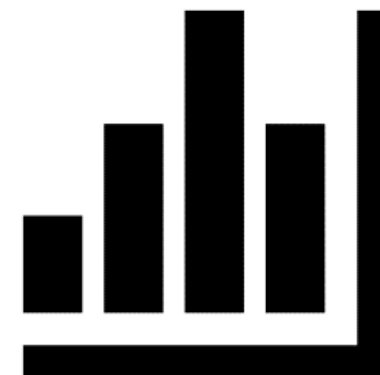
Find PII / PHI Content



Act on PII Content



Email Notifications



Audit Data sources & Dashboards

*Search → Tag → Flag → Remove → Analyze → Automate*

# Say Goodbye to Sensitive Data Messes

PII/PHI  
Data Manager



# Challenge 8: Communicating Impact

Uncommunicated and under-communicated changes to source data lead to confusion, incorrect dashboards, and ultimately a deterioration of data trust

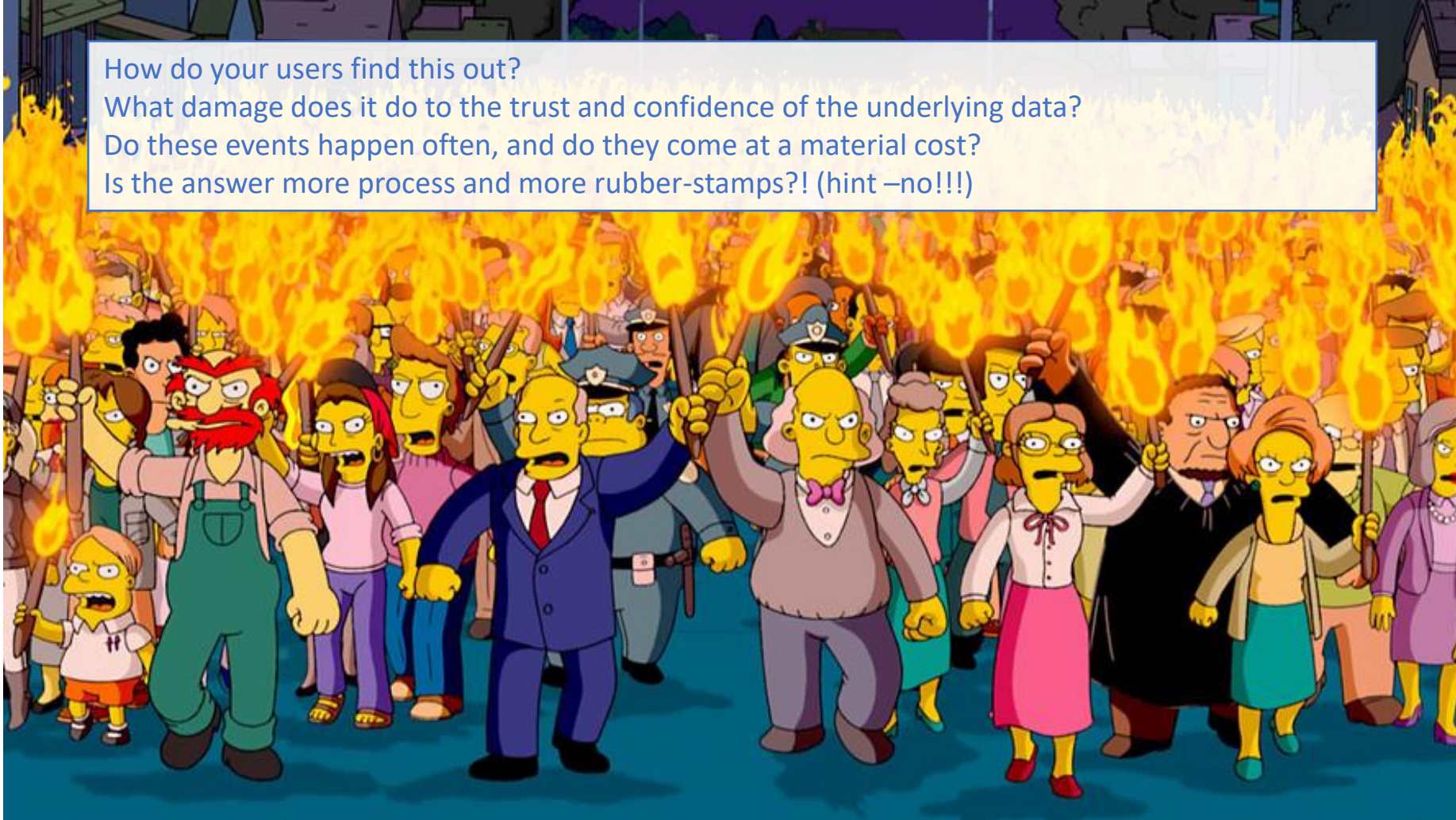
**This can take many forms:**

- Fields added/removed from tables
- Field/KPI definitions changed
- Data models altered (joins/filters/scope/tables)
- Database/schema/table deprecation
- Data under maintenance



# What Happens When Changes Are Uncommunicated?

How do your users find this out?  
What damage does it do to the trust and confidence of the underlying data?  
Do these events happen often, and do they come at a material cost?  
Is the answer more process and more rubber-stamps?! (hint –no!!!)



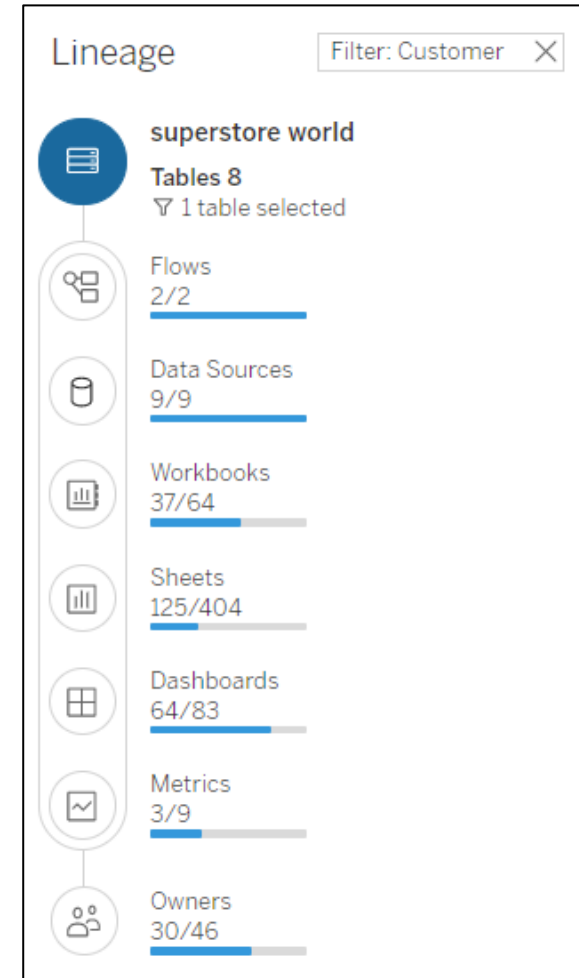
# Impact Analysis and Downstream Notification

## Filter by Database, Table, or Field

| Tables (8)                          |   |      |            |             |              |                                        |                 |
|-------------------------------------|---|------|------------|-------------|--------------|----------------------------------------|-----------------|
|                                     | ⓘ | Type | Name       | ↓ Workbooks | Data sources | Columns                                | Contact         |
| <input type="checkbox"/>            | ⚠ | 📅    | Order.Fact | 64          | 9            | Customer ID, Discount, Order ID + 6    | none            |
| <input type="checkbox"/>            | ⚠ | 📅    | Order.Dim  | 55          | 9            | City, Country, Order Date + 6          | Steve Oluborode |
| <input type="checkbox"/>            |   | 📅    | Product    | 52          | 9            | Category, Product ID, Product Name + 1 | none            |
| <input checked="" type="checkbox"/> | ⚠ | 📅    | Customer   | 37          | 9            | Customer ID, Customer Name, Email A... | Eric Freeman    |



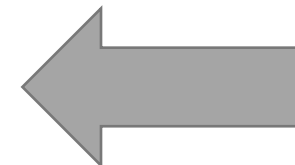
## Find Related Content Owners



## Proactively Alert All Downstream Owners

Downstream Owners (30) Select All Clear All | 30 items selected Send Email

| ↑ Name | Owned workbooks | Owned data sources | Owned metrics |
|--------|-----------------|--------------------|---------------|
|--------|-----------------|--------------------|---------------|





# Automatic Data Quality Warnings

Tableau communicates when data sources encounter problems via Automatic Data Quality Warnings for extract and Prep flow failures

**Orders flow** ☆ ...  
Owner **Kate Grinevskaia** Modified **Apr 13, 2021, 10:55 AM** ⓘ Flow run failed

Edit Flow

Overview Connections Scheduled Tasks Run History **Lineage**

Output Steps (1)  
Output

**On this asset**

- ⓘ Flow run failed

**Orders flow**

Set by **Kate Grinevskaia**  
Apr 13, 2021, 10:55 AM

**1/1 output steps failed to run**

The flow failed to run. For more details, check with Tyler Doyle.

Search for views, metrics, workbooks, and more ⓘ ⓘ 👤

**Orders** ☆ ⓘ ⓘ  
Owner **Kate Grinevskaia** Data is **Extract (Unencrypted)** ▼ Apr 13, 2021, 10:30 AM

New ▼

Ask Data Connections 1 Extract Refreshes 1 Connected Workbooks 1 **Lineage**

**Fields (16)**

| Type | Name                          | Sheets | Description    |
|------|-------------------------------|--------|----------------|
| □    | Abc Customer ID               | 0      | No description |
| □    | # Employee ID                 | 0      | No description |
| □    | # Freight                     | 0      | No description |
| □    | 📅 Order Date                  | 1      | No description |
| □    | # Order ID                    | 0      | No description |
| □    | # Orders (Count)              | 0      | No description |
| □    | 📅 Required Date               | 0      | No description |
| □    | Abc Ship Address              | 0      | No description |
| □    | Abc Ship City                 | 0      | No description |
| □    | Abc Ship Country              | 0      | No description |
| □    | 📍 ShipCountry, ShipPostalCode | 0      | No description |
| □    | Abc Ship Name                 | 0      | No description |

**Lineage**

- Databases 1
- Tables 1
- Orders Fields 16**
- Workbooks 1
- Sheets 1
- Owners 1

# Recap

**Whew – that was a lot! What did we just discuss:**

- The misalignments of traditional approaches to analytics data governance
- How Tableau Data Management solves numerous hard-to-solve governance challenges
- The value for data workers + consumers of having governance baked directly into their analytics experience

# Let's Hear Your Questions

