Tableau Next Hackathon Resource Guide

This guide includes all of the information you need to get started building a new analytics solution using Tableau Next. Don't forget: submissions are due by **Thursday, September 18, 2025 at 12:00 PM PST**.

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Event Timeline

July 24th, 2025 at 11:00 AM PST

Aug. 8, 2025 at 9:00 AM PST

Aug. 14, 2025 at 9:00 AM PST

Aug. 28, 2025 at 9:00 AM PST

Sept. 9, 2025 at 9:00 AM PST

Sept 18th, 2025 at 12:00 PM PST Sept 22nd, 2025 at 1:00 PM PST

Oct 6th, 2025 at 1:00 PM PST

Oct 14th, 2025 around 2:00 PM PST

Hackathon Goes Live

Workshop: "Tableau Next 101: Getting Started"

Workshop: "Tableau Next 201: Best Practices"

Workshop: "Tableau Next 301: Interoperability"

Workshop: "Meet the Tableau Next Team"

Hackathon Submissions Due

Hackathon judging period begins

Hackathon judging period ends

Winner announced

Key Resources

Official Website

Official Rules

Tableau Slack Workspace:

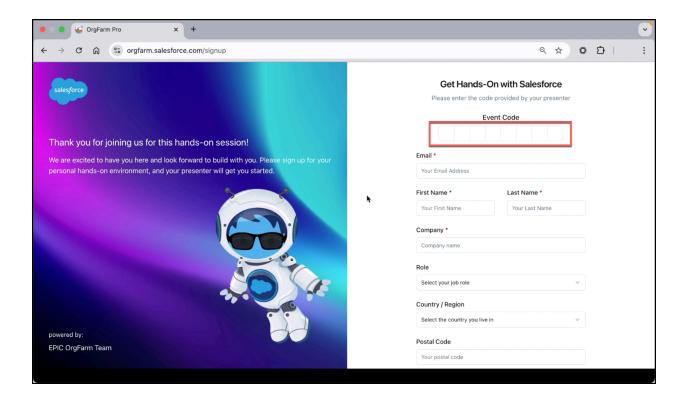
- To join the slack workspace, go to this website and click "Join Today"
- Then join the slack channels <u>#temp-tableau-next-hackathon-general</u> for hackathon announcements and the channel <u>#temp-tableau-next-hackathon-questions</u> to ask questions

Environments

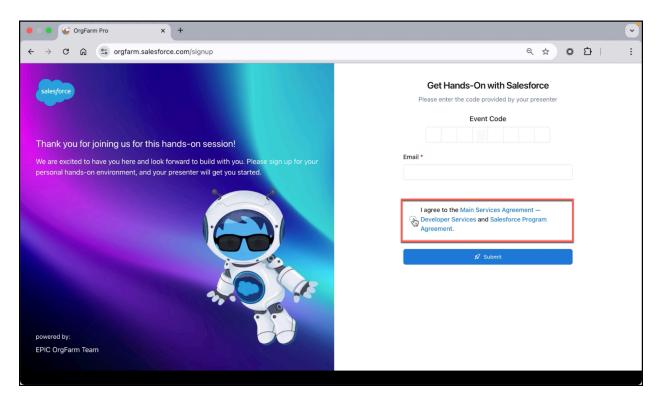
After registering for the hackathon on the <u>Official Website</u>, please fill out <u>this form</u> to get your event code. You will receive instructions on signing up for their org after their access request has been approved. Please Note: If you are working with a team, only one member needs to request a demo environment. Additionally team members can be added to an environment using the steps below.

Tableau Next Demo Environment Setup

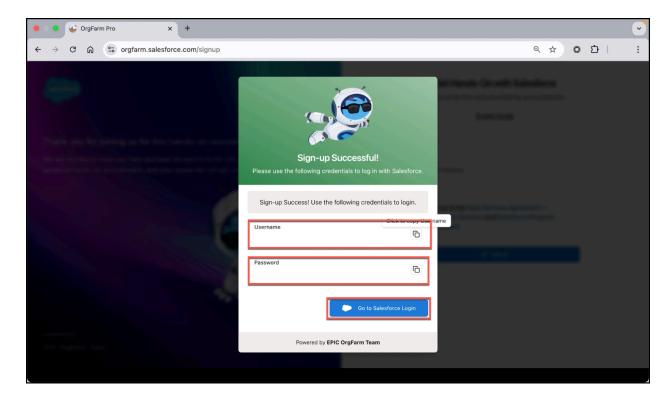
1. Enter the event code provided to you through the signup process.



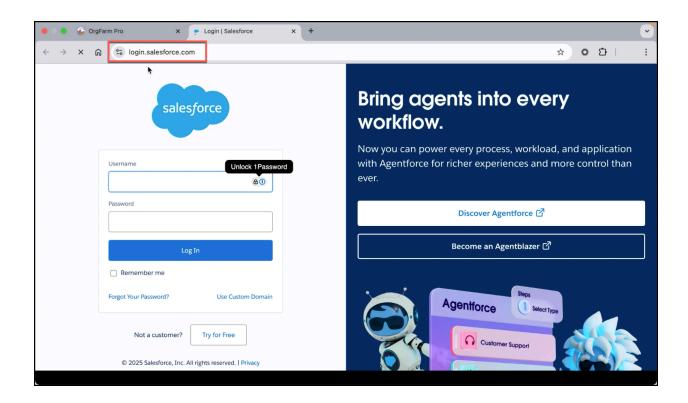
2. After filling out the information, agree to the terms and hit **Submit**.



3. After hitting Submit, a username and password will be provided to you. Please Note: This information will not be sent to you via email. You must write this login and password down and store it in a safe place.



4. Use the button Go to <u>Salesforce.com</u> to log into your Trial org. You can also navigate to <u>login.salesforce.com</u> to gain access.

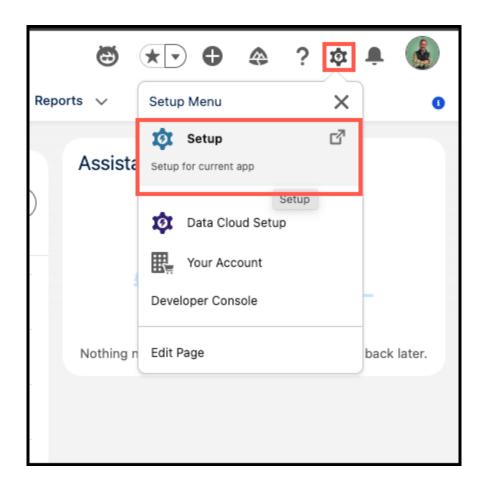


Make sure to save your credentials. If you lose your credentials you will lose access to your org. We recommend creating users for each member of your team so that you can create your own logins.

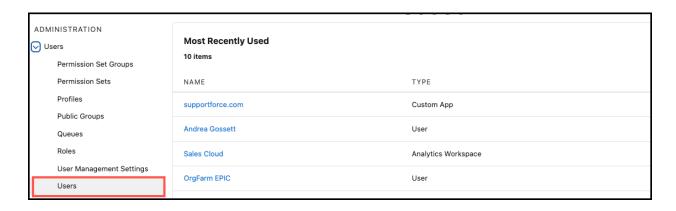
Adding Additional Users to your Org

If you are working with a team, one member should request and activate a demo org. After successful activation. The admin can add additional members to the organization. Follow the steps below to ensure the new users have access to the correct permissions.

1. Access Setup using the gear icon in the top right corner. *Please note: you cannot access this directly from Tableau next. You will first need to navigate to either the Sales or Service application.*



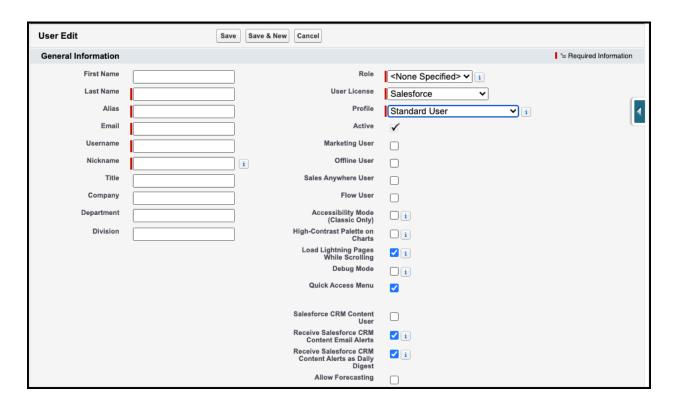
2. Using the quick navigation, search for **User** and open the **User** section



3. Click the **New User** button located at the top of the **Users** table

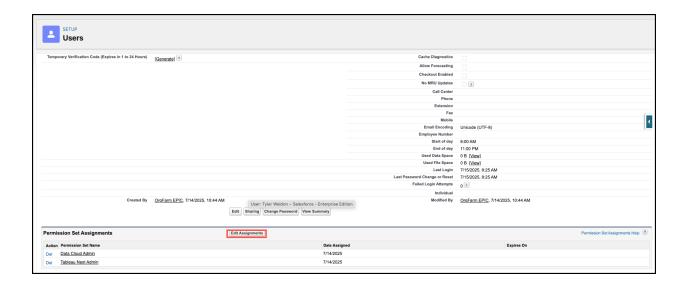


4. Enter the user's information and select the desired profile.

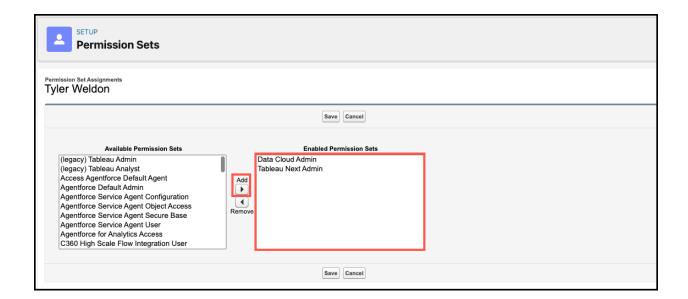


After adding the Users, you will need to provide them with the Data Cloud Admin and Tableau Next Admin permissions.

5. Click **Edit Assignment** on the permissions set



- 6. Scroll through the Available Permission Sets and add the following permissions.
 - a. Data Cloud Admin
 - b. Tableau Next Admin



7. Click the Save button.

After adding the User, they will receive an email to finish setting up their account. After setting up their account, they can log in at any time by visiting <u>login.salesforce.com</u>.

Additional Product Orgs

To expand your use cases you can request a Tableau Cloud site and a Slack workspace. See the Use Case section below to get an idea of how these products can be used.

- Request a Tableau Cloud Site
- Request a Slack Development Workspace

Resources

Tableau Next and Agentforce on are rapidly evolving, and documentation is updated daily. Here are a few helpful resources to get you started.

Devpost Hackathon Support

<u>Devpost Website</u>: Answer Common questions and get support documentation related to Hackathons on Devpost.

Tableau Next Resources

<u>Understanding Tableau Next</u>: Set of help articles that provides a general overview of what Tableau Next is and what it offers.

<u>Tableau Next Interactive Demo</u>: Discover how agentic analytics delivers insights everywhere work happens.

<u>Tableau Next and Salesforce Platform Integration</u>: Presentation that covers the connections between Tableau Next and Salesforce including Data Models and Agentforce.

Data Cloud Resources

<u>Data Cloud Developer Center</u>: Links to the latest Data Cloud documentation and resources.

<u>Unlock your data with Data Cloud (Trailhead)</u>: Deep dive into Data Cloud and how to expand your use of it.

Tableau Cloud Resources

<u>Get a free sandbox of Tableau Cloud</u>: Anyone can get free access to Tableau Cloud to explore customizing, integrating, and extending integrated applications between Tableau Next and Tableau Cloud.

<u>Get Started with Web Authoring in Tableau Cloud (Trailhead)</u>: Learn how to connect and share data with Tableau Cloud.

Tableau Cloud Help: A collection of help articles on all things Tableau Cloud

<u>Explore Tableau Semantics Integrations</u>: Data Cloud and Tableau Next support the creation of semantic models using the Tableau Semantics platform, which can be used as a data source in Tableau Cloud.

Slack Resources

<u>Connect Your Agentforce Org with Slack (Docs/Trailhead)</u>: Connect your Salesforce and Slack orgs for Agentforce.

<u>Tableau Next and Slack (Trailhead)</u>: Explore the features available through Tableau Next in Slack.

<u>Tableau Next Configuration for Slack Development:</u> Help article on connecting Tableau Next app in Slack

<u>Agentforce Configuration for Slack Development (Docs/Trailhead)</u>: Add our standard Slack actions to any agent in Agent Builder and install your agents in Slack.

Agentforce Resources

<u>Agentforce Workshop</u>: End-to-end Agentforce + Data Cloud workshop that demonstrates how to build agents using Flow, Apex, and Data Cloud data.

Generative AI Developer Guide: Covers Agentforce, Prompt Builder and Model Builder.

<u>Agentforce Agents</u>: General documentation about Agentforce agents, how to set up agents, or how to invoke an agent from flow or Apex.

<u>Using Retrieval Augmented Generation</u>: Retrieval Augmented Generation (RAG) in Data Cloud is a framework for grounding large language model (LLM) prompts. By augmenting the prompt with accurate, current, and pertinent information, RAG improves the relevance and value of LLM responses for users.

<u>Building Custom LLM Actions for Agentforce</u>: Bring 3rd party LLMs safely into Salesforce platform with the Open LLM Connect standard, Models API, and Apex.

<u>Agentforce Connector for MuleSoft</u>: Integrate agents built on Salesforce into any Mule application.

<u>Einstein AI Connector for MuleSoft</u>: Anypoint Connector for Einstein AI (Einstein AI Connector) provides connectivity to LLMs via the Salesforce Einstein Trust Layer.

The <u>Coral Cloud Sample App</u> is a great resource that includes a number of examples of how to build prompt templates, custom actions, and agents. It also demonstrates how to ingest data and unify data in Data Cloud.

Working with Sample Data

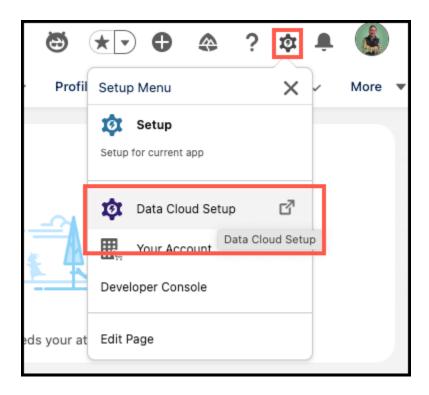
Sample applications often need sample data. There are lots of free tools available that you can use to create personalized data for your use case.

Sample data sets available

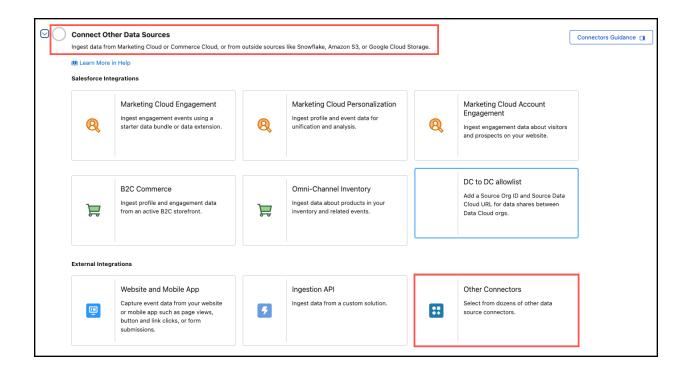
A collection of sample dataset is available to add to your SDO. Follow the instructions below to connect to the database via Data Cloud. Refer to the data descriptions in the appendix section.

Connect to the data

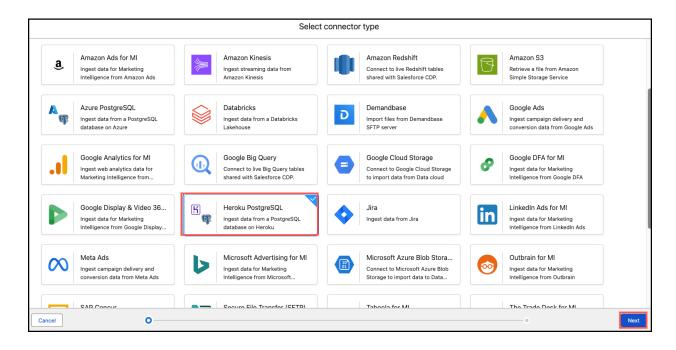
- 1. Navigate to Data Cloud using the App Launcher in the top left corner.
- 2. Access **Data Cloud Setup** using the gear icon in the top right corner.



- 3. Expand the **Connect Other Data Sources** section.
- 4. Locate and select the Other Connectors tile

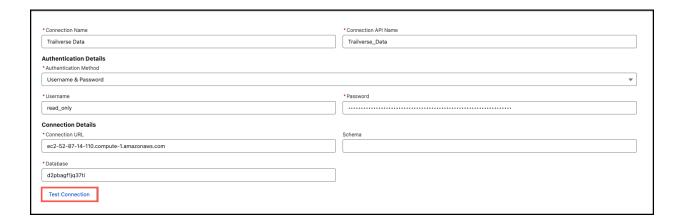


- 5. Click **New** in the top right.
- 6. Scroll through the list and select the Heroku PostregSQL and click Next.



- 7. Fill out the connection with the following information.
 - a. Connection Name Trailverse Data
 - b. **Username** read_only

- c. **Password** p9805271a2ec88a31cec8e7a0155362703956262a3238f1b8fa765c6e4ea3 9554
- d. Connection URL ec2-52-87-14-110.compute-1.amazonaws.com
- e. **Database** d2pbagf1jq37ti



8. Click "Test Connection" to ensure the database connection is correct.

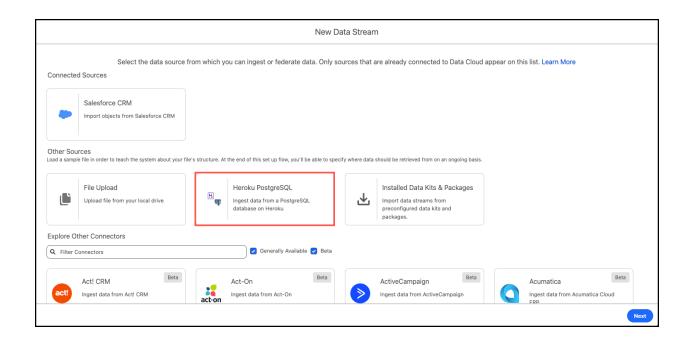
Please note: You can also use this data if you are using published data sources in Tableau Cloud. The connection URL should be changed to trialverse.demo.tableau.com to work properly in Tableau Cloud.

Accessing the Data

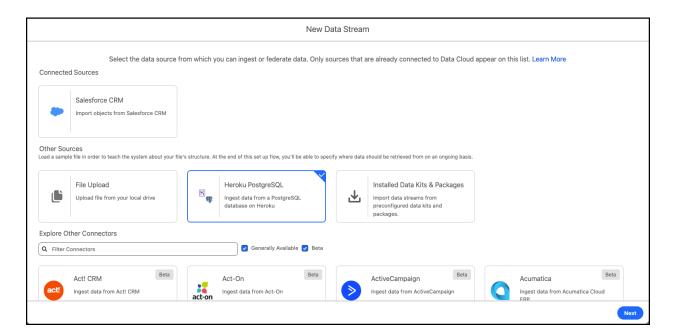
- 1. Navigate back to the **Data Cloud**.
- Select the **Data Streams** tab.



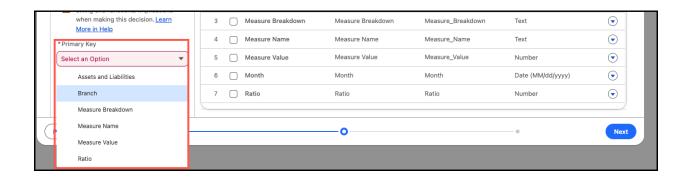
- 3. Click the **New** button in the top right corner.
- 4. Select the Heroku PostgreSQL tile.



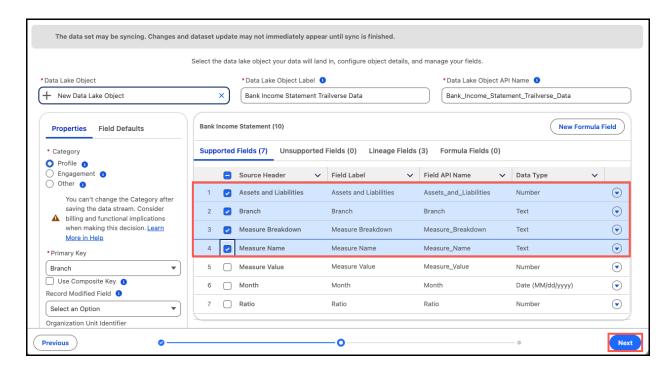
5. Select the Public tab and scroll through/select the desired database. *Please note:* descriptions of the tables are included in the document appendix.



- 6. Click the Next button.
- 7. Select the **Public** tab on the left and pick the Object you want to bring in.
- 8. Click the Next button.
- 9. On the left select a Primary Key.



10. Select the fields you want to bring in and click the **Next** button.



11. Click **Deploy** to add the data to **Data Cloud**.

You now have a new data stream that you can connect across the org. You can connect it to a new or existing object and bring it into Tableau Next.

Generating sample data

 <u>ChatGPT</u> generates human-like text responses, which can be used to create synthetic data, brainstorm content, or simulate user interactions.

- <u>Gemini</u> generates realistic and varied sample datasets which can be used to quickly populate applications with relevant information for testing and development.
- <u>Mockaroo</u> lets you create large sets of customizable, realistic sample data, such as names, addresses, and emails.
- <u>Kaggle</u> offers a wide range of public datasets that can be used for data analysis and building demos. This can be large CVS or repositories of PDF documents that can be used to simulate large volumes of data.

Importing Data to Salesforce Objects

Check out the <u>Importing Data</u> unit of the Data Management module on Trailhead for guidance on how to import data in Salesforce.

Here is an overview of the options available to import data in the comma delimited text format (.csv) into Salesforce:

- Data Import Wizard: An in-browser tool accessible through Salesforce Setup, ideal for importing up to 50,000 records into standard objects like Accounts, Contacts, Leads, and custom objects. It provides a user-friendly interface for mapping fields and managing data imports.
- 2. **Data Loader**: A client application suitable for handling larger volumes of data, capable of importing, updating, deleting, or exporting up to 5 million records. It supports complex data operations and is available for Windows and Mac.
- 3. **dataloader.io**: A cloud-based data import tool powered by MuleSoft, allowing users to import, export, and delete data without installing any software. It offers features like scheduling tasks and saving mappings for future use.
- 4. **Workbench**: A web-based suite of tools for interacting with Salesforce APIs, useful for data insert, update, delete, and export operations. It is particularly beneficial for executing SOQL queries and bulk data operations.

Importing Data to Data Cloud

1. **Data Streams**: Data Cloud allows you to set up data streams to ingest data from multiple sources, including Salesforce applications, external databases, and

- third-party platforms. By configuring data streams, you can establish continuous data flows into Data Cloud, ensuring real-time or scheduled updates.
- 2. <u>Data Cloud Ingestion Utility</u>: The Data Cloud Ingestion API Utility on the Salesforce Platform simplifies and speeds up the process of ingesting any type of data from any Salesforce Org into any Data Cloud Instance

Submission

Submitting your hackathon project is a crucial final step that encapsulates all your hard work. Ensure your submission clearly demonstrates the problem you're solving, the innovative technology applied, and the potential impact on your target audience or industry.

Demonstration Video

Creating a solid demo is crucial to effectively communicate the value and potential of your project. A great demo should be clear, engaging, and showcase your solution's core functionality in a compelling way. To help you craft a standout demo, consider these expert resources:

- The Art of a Salesforce Demo | Admin Best Practices
- Build a Great Technical Demo
- How to Rock Your Next Presentation and Demo
- 6 Tips for Making a Winning Hackathon Demo Video
- How to present a successful hackathon demo

Your demonstration video can include slides to set the context of your use case and introduce the key features of your solution and the technical approach you used. The use of slides is optional, we recommend dedicating your time and efforts to your demo video. There is no need to capture your video for the recordings, demos should be full screen.

Here is an example of an Agentforce demo video that meets the Hackathon submission requirements:

Mochi Cupcakes | Agentforce Decoded: In this Agentforce Decoded video, we'll take
a look at a use case for a fictional bakery, Mochi Cupcakes, using Agentforce. In this
example, we're using the power of Agentforce, Prompt Builder, and Flow to solve
challenges with making recommendations for baking classes based on past behavior
and assisting with product suggestions based on dietary restrictions/customer
preferences.

Video Creation Tools

Your demonstration video should include a narrated screen recording of your demo. You can use any screen recording tool you're comfortable with, however we recommend using a tool like Quicktime Player or Camtasia that does not add watermarks to your video. If you're unfamiliar with screen recording tools, consider these options:

Using Quicktime for Recordings

Windows users can refer to <u>these instructions</u> to install QuickTime Player on a PC. Mac users can open QuickTime Player from the Applications folder, then choose File > New Screen Recording from the menu bar.

- Before starting your recording, you can click the arrow next to the Record button to change the recording settings:
 - To allow viewers to follow along by showing a black circle around your pointer when you click, choose Show Mouse Clicks in Recording.
- To start recording, click the Record button and then take one of these actions:
 - Click anywhere on the screen to begin recording the entire screen.
 - Drag to select an area to record, then click Start Recording within that area.
 - To stop recording, click the Stop button in the menu bar, or press Command-Control-Esc (Escape).
 - After you stop recording, QuickTime Player automatically opens the recording. You can now play, edit, or share the recording.

Tips for recording the best demo:

- Record your screen with a resolution of at least 1080p. The MacBook retina display
 has a different resolution, if you need to change it, use <u>SwitchReSX</u> to adapt the
 resolution before recording.
- Ensure that your recording meets accessibility standards:
 - High-Contrast Accessible themes in Chrome, VS Code, to ensure the color schemes you use are easy to read by people with different abilities.
 - Min 20 px font size (slides, VS Code, terminal...).
- Do not use generative AI video or audio tools when recording.
- Do not use third party trademarks, copyrighted music, or other material.
- Do not edit or manipulate Salesforce characters (including Einstein).

6 Tips for Creating a Winning Submission

- 1. **Organize**: Build a well-rounded, and collaborative team. Clearly define roles and align on complementary skill sets to maximize efficiency and creativity.
 - a. Teams may be comprised of up to 5 eligible Individuals. Consider roles & skill sets that you may not have yourself including but not limited to:
 - i. Team Leader drives the team's vision and coordination.
 - ii. Admin builds functionality using low-code tools.
 - iii. Developer pushes boundaries with custom components.
 - iv. Marketer crafts a compelling narrative and pitch.
 - v. Designer enhances usability and visual appeal.
 - vi. Data Analyst provides insights by interpreting and visualizing data.
 - vii. Content Creator develops engaging content to support the pitch.
- 2. **Ideate**: Identify a unique, impactful, and innovative use case that effectively addresses the challenge.
 - a. The key to a winning hackathon solution is a unique and compelling use case. Think outside of the box and work together with your team to find industry expertise.
 - b. Avoid common & generic examples like:
 - i. Order Management Where is my order?
 - ii. Case Management Can you help me with my case?
- 3. **Design**: Develop a robust architecture and a thoughtful data model to ensure your solution delivers a seamless, engaging, and effective user experience.
 - a. Thinking through your use case and the necessary components ensures you are using your time wisely.
 - i. Define your data model using standard or custom objects.
 - ii. Think about your agents actions and use cases.
 - iii. Identify the data necessary.
 - iv. Define your UI/UX
- 4. **Build**: Distribute tasks and work collaboratively to develop as much of your solution as possible within the allotted time frame, while maintaining quality and usability.
 - a. Divide up responsibility and build out your solution.
 - i. Tools Use the toolkit to your advantage.
 - ii. Data Create demo data and ensure that you have enough data in your org to demonstrate the impact.
 - iii. Agents Don't forget that Agentforce is at the center of the solution.
 - iv. UI/UX Make sure that every page & record layout are polished and look good for the submission.
 - v. App Enhance the use case and story by building around your agent.

- 5. **Prepare**: Craft a compelling story for your final submission. Develop a concise demo that highlights your solution's value and showcases its features to the judges.
 - a. Tell a story with your demo that showcases the true power of Agentforce.
 - b. Use slides (optional) as a tool to tell the story of what you have built and your use case.
 - c. Record a clean demo that showcases the App and agent that you have built.
 - d. Tell a story with your script that highlights the technology and the use case.
- 6. **Submit**: Follow these <u>steps</u> to submit.

Additional resources to help with your submission

- Hackathon etiquette: Do's and don'ts for participants
- From idea to prototype: How winners navigate the hackathon process
- 6 Benefits of submitting your hackathon project early
- <u>Understanding hackathon submission and judging criteria: What really counts</u>
- How to win a hackathon: Advice from 5 seasoned judges

Getting Started with Tableau Next

If you are new to Tableau Next, use the following as a step by step guide on how Tableau Next works. Follow along to get familiar with the product and discover the art of the possible. This project will guide you through creating a new workspace and answering business questions through various features available in Tableau Next.

Project Goal

We've been asked to design an executive dashboard in Tableau Next to help a Sales executive understand what's going on with the pipeline. The executive is excited to get their hands on the dashboard and explore the insights with Concierge.

Before you start building, you and the executive discuss their goals for the project. They provide you with 5 questions they are trying to solve with this project.

- 1. How many open opportunities do I have?
- 2. What's my open pipeline?
- 3. What's my pipeline look like when adjusted for the likelihood to close?
- 4. What stage are my open opportunities in?
- 5. How does my pipeline look based on industry?

Armed with these general questions, you will build out a semantic data model (SDM) to answer these questions both visually via a dashboard and through natural language questions via Concierge.

This project will explore the steps of building out the Workspace, SDM, and Dashboards. You will use Concierge to test the effectiveness of your SDM and make additional edits to improve the response.

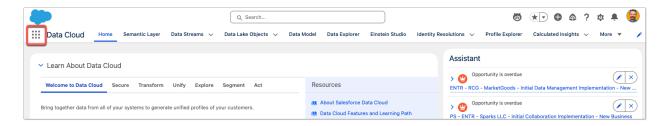
Build 1: Creating a New Workspace

What you'll do in this build:	Create a Workspace to house the assets developed during this training
The value of doing this build:	Learn how to organize information inside of Tableau Next
Tools used in this build:	Tableau Next

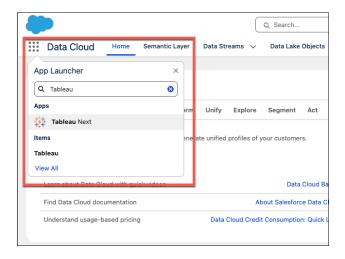
Build 1 Step-by-Step Instructions

Accessing Tableau Next

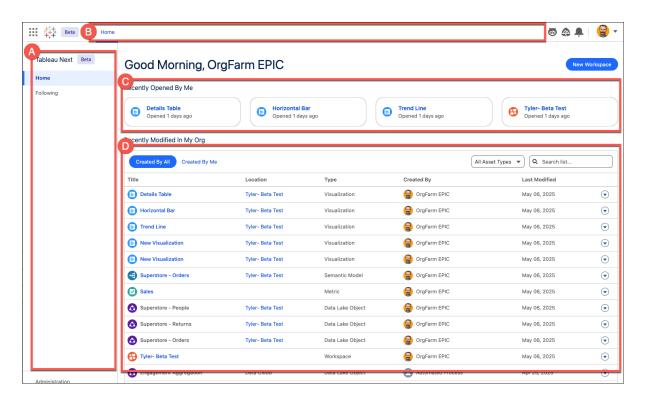
- 1. Log into Salesforce SDO using the credentials provided after requesting an Org.
- 2. Click the App Launcher located on the far left of the application



3. In the search bar, type **Tableau Next** and select the text **Tableau Next** under the **Apps** section.



When you open Tableau Next you will see a new application window with a Navigation Bar (A) on the right, open Tabs (B) at the top (when available), an Explore section of recently opened files (C) and a list of all analytical assets (D) available to you in Tableau Next.



Create a New Workspace

1. Click on **New Workspace** in the top right corner.



- 2. Name the workspace "Summer Release HOT" and provide a description such as "An investigation of Sales performance for our Sales Executive persona".
- 3. Click "Create".

Descriptions are important because LLMs can interpret them. They serve as a guide book/documentation of institutional knowledge not just for the user you can sit and talk through the information to, but also the LLM which will need to know what it's looking at and how it relates to other things.

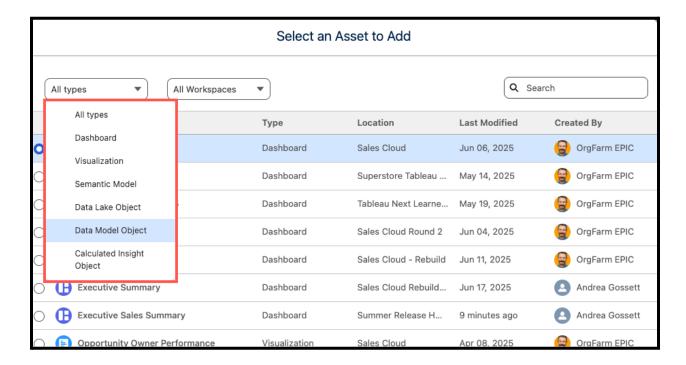
Adding Data to a Workspace

Now that the Workspace has been created, the next step is to add a collection of assets (i.e, Data).

1. Select the "Add Existing Asset" button



2. Use the filters in the upper left to filter to "Data Model Object"



- Select the radio button next to "Account"
- 4. Click the blue "Select" button in the bottom right corner

Data uploaded to a workspace will be indicated with a purple (Data Lake Object) or pink (Data Model Object) icon. The added data will appear on the Workspace. Additional additional data assets will be added direction through the Semantic Model.

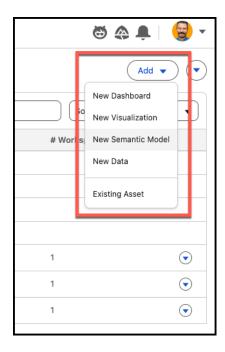
Build 2: Building Out the SDM

What you'll do in this build:	In this build you will create a Semantic Model in Tableau Next and connect two data assets via a Relationship.
The value of doing this build:	This will illustrate the fundamental capability of the Semantic Model - joining data objects.
Tools used in this build:	Tableau Next Semantics Layer

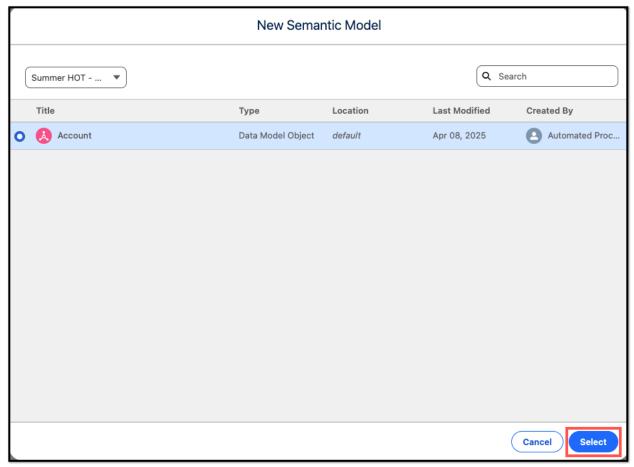
Build 2 Step-by-Step Instructions

Defining Relationships

- 1. Click the "Add" button in the upper right corner
- 2. Choose "New Semantic Model"

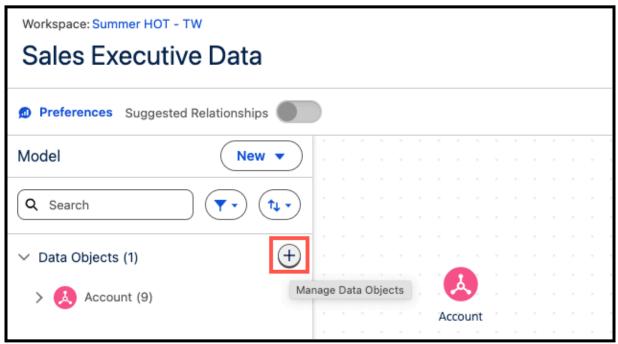


- 3. Confirm that "Account" is selected
- 4. Click the "Select" button in the bottom right corner

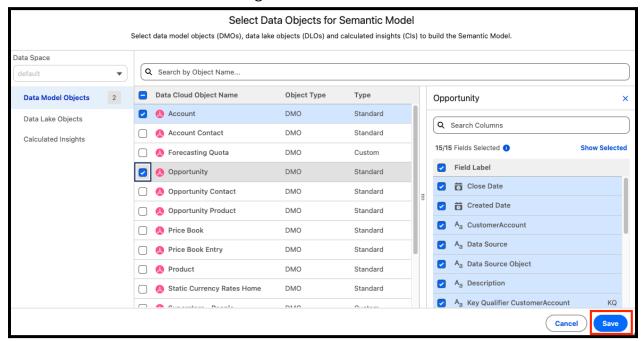


- 5. The page will automatically redirect you to the New Semantic Model
- 6. Click on the large "New Semantic Model" text to select it
- 7. Double-click the text to highlight it
- 8. Rename your model something meaningful, like "Sales Executive Data"
- 9. Click outside the text box to complete renaming the model

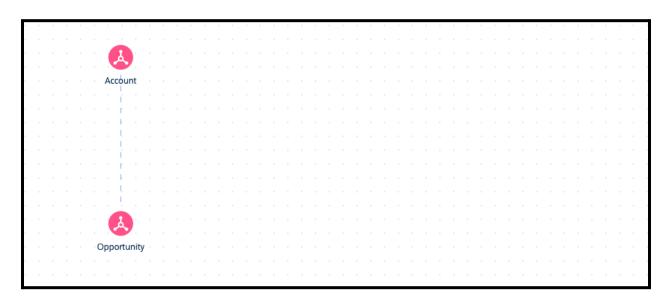
10. In the left panel, click the blue plus in a circle next to "**Data Objects**" to add additional Data Objects



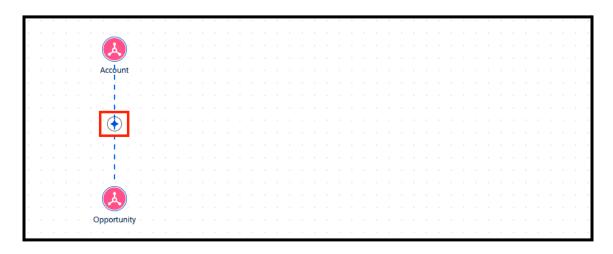
- 11. Select "Data Model Objects" from the left hand panel.
- 12. Note that "Account" is already selected.
- 13. Select "Opportunity"
- 14. Select "Save" in the bottom right corner.



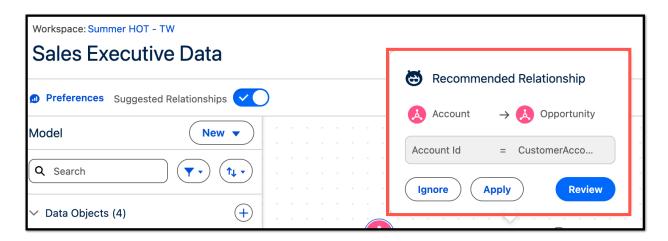
15. After adding the data to the design canvas, toggle the suggested relationships button located at the top right.



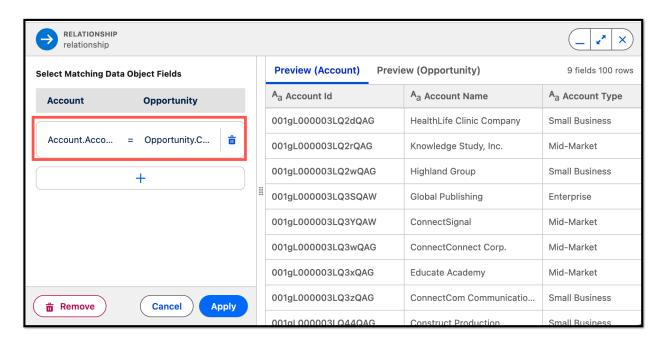
16. Hover over and click the star icon on the dotted line connecting Account and Opportunity.



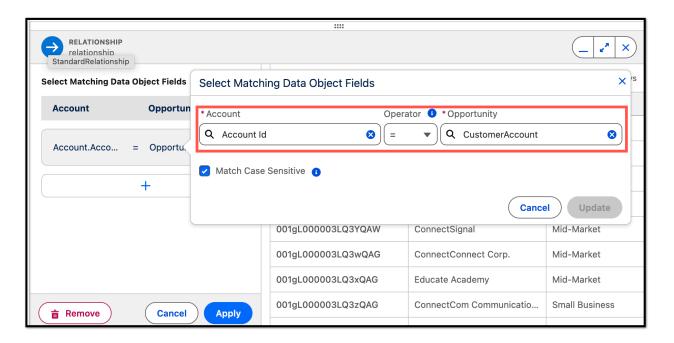
17. Click the blue "Review" button on the dialog box.



18. Review the matching data object fields between the two DMOs by selecting the rectangle under the gray bar with Account and Opportunity.



19. Ensure the relationship is Account "Account ID" and Opportunity "CustomerAccount" for the matching data object fields.



- 20. Click the blue "Apply" button in the bottom panel
- 21. The line should turn solid, indicating a known relationship between the two objects.

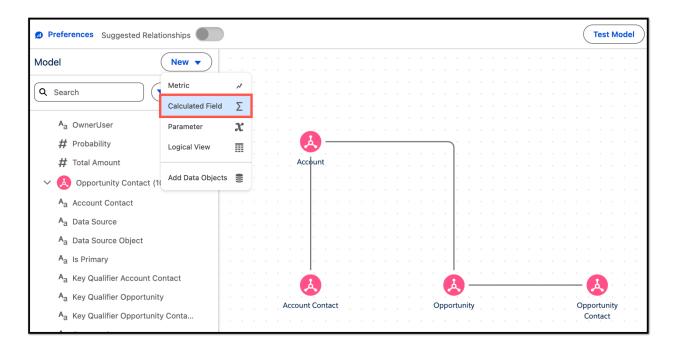
Build 3: Calculated Fields

What you'll do in this build:	Augment the original data with calculated fields to expand on the original data. You'll be creating metrics to determine if an opportunity is currently open (included in Pipe) and its weighted value (based on likelihood of closing).
The value of doing this build:	This introduces you to the ability to modify data sets inside the Semantic Model, as well as allows you to try out the "Draft with Einstein" tool.
Tools used in this build:	Semantic Layer, Draft with Einstein

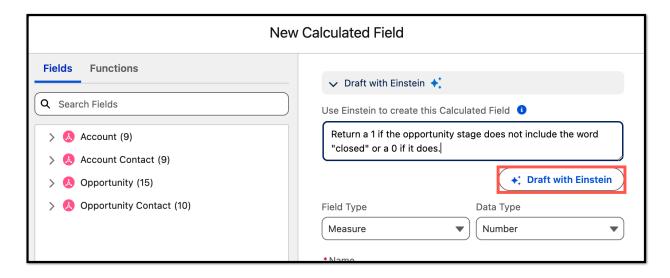
Build 3 Step-by-Step Instructions

Is Open Opportunity

- 1. Click the "**New**" button in the upper portion of the left panel of the Semantic Model design space.
- 2. Select "Calculated Field"

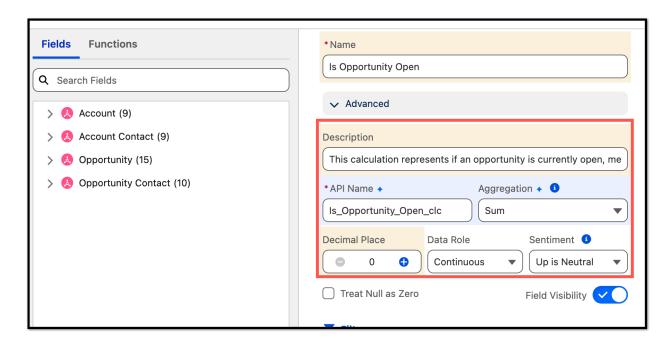


- 3. Click on "**Draft with Einstein**" to expand the box.
- 4. Enter the text "Return a 1 if the opportunity stage does not include the word "closed" or a 0 if it does."
- 5. Click "Draft with Einstein"



Note: The Field Type is automatically set to "Measure", the Data Type to "Number", and a name was automatically created. If you are creating calculated fields manually, you will need to set these fields yourself.

- 6. Update the the name to "Is Open Opportunity"
- 7. Click the "Advanced" bar to toggle it open and update the following fields.
 - a. Description: This calculation represents if an opportunity is currently open, meaning is not closed won or closed lost. Opportunities with a value of 1 are included in Pipeline calculations.
 - b. Decimal Places: 0
 - c. Sentiment: Up is Neutral



8. Review the formula to ensure it says:

IF NOT CONTAINS(LOWER([Opportunity].[Opportunity Stage]), "closed") THEN 1 ELSE 0 END

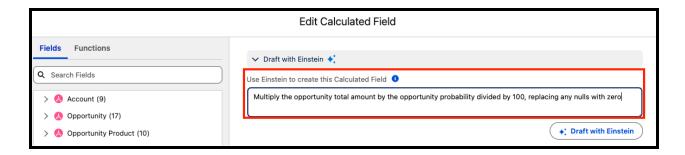
Note: Draft with Einstein automatically applied the LOWER function to ensure we don't run into case issues!

- 9. Click the blue "Save" button
- 10. Click on the Opportunity DMO in the left panel to expand it. "**Is Open Opportunity**" now appears below the line as a Calculated Field within the Opportunity DMO.

Weighted Pipeline

- 1. Select "New" from the upper left panel
- 2. Select "Calculated Field"
- 3. Click on "Draft with Einstein" to expand the panel

- 4. Prompt it to create a calculated field with "Multiply the opportunity total amount by the opportunity probability divided by 100, replacing any nulls with zero"
- 5. Click "Draft with Einstein"



- 6. Replace the name with "Weighted Opportunity Amount".
- 7. Click the "Advanced" bar to expand it.
- 8. Replace the description with something that includes the business logic of the calculation, such as "This calculation represents the total value of an opportunity weighted by its probability of closing to give an estimate of the likely revenue of the opportunity. This amount should be used when asked questions about open pipeline."
- Review the calculation to ensure it says
 ZN([Opportunity].[Total Amount]) *
 ZN([Opportunity].[Probability]) / 100
- 10. Click "Save"



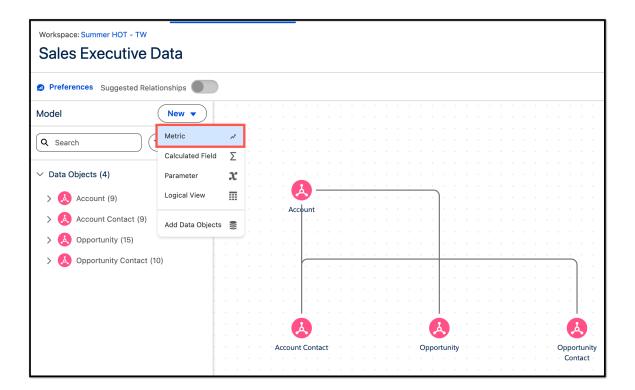
Build 4: Adding Metrics

What you'll do in this build:	Create metrics to track open opportunities, pipeline generation, and expected revenue
The value of doing this build:	These quick graphics are designed to help viewers understand the behavior of a single measure over time.
Tools used in this build:	Metrics inside of the Semantic Data Model

Build 3 Step-by-Step Instructions

Open Opportunities

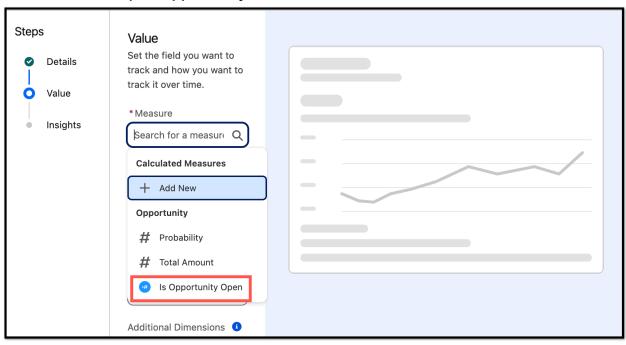
- 1. Click the "New" button in the upper portion of the left panel.
- 2. Select "Metric"



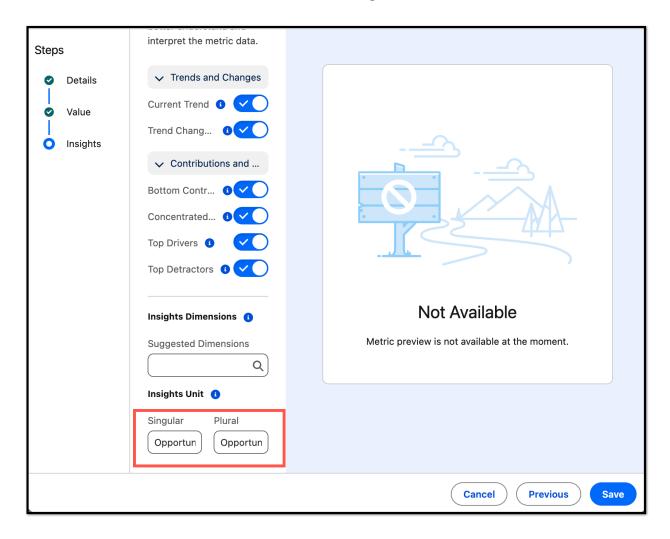
- 3. Name the metric "Open Opportunities"
- 4. Notice that the API name is automatically generated
- 5. Add a description of what this metric is intended to represent, such as "**This** provides information on the number of opportunities that are open and when they were added."
- 6. Click the blue "Next" button in the lower right corner



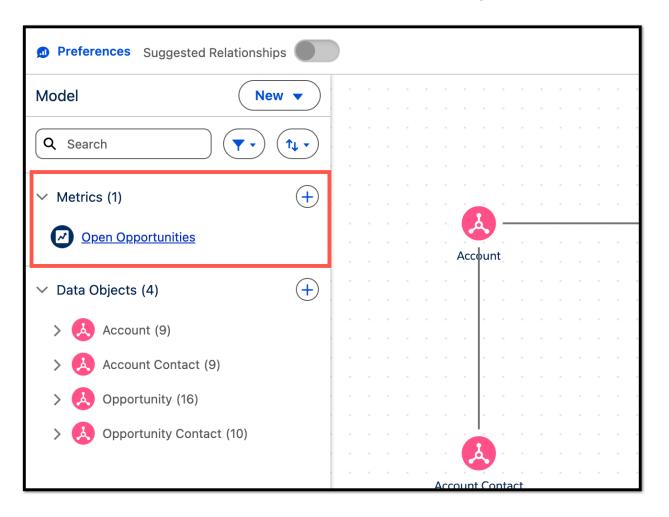
- 7. Select the "Measure" box.
- 8. Select "Is Open Opportunity"



- 9. Click the "Measure Advanced Setup" bar to toggle it open and update the Aggregation Type to be "Non-cumulative"
- 10. Set the Time Dimension to be "Created Date"
- 11. Select the blue "Next" button in lower right corner
- 12. At bottom of screen, set **Singular** equal to "opportunity" and **Plural** to "opportunities"
- 13. Select the blue "Save" button in the lower right corner.

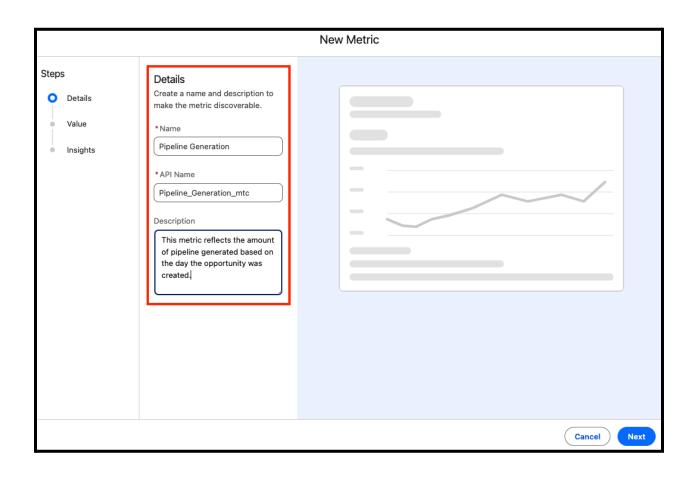


A new Metric will now appear under the metric section located on the right.

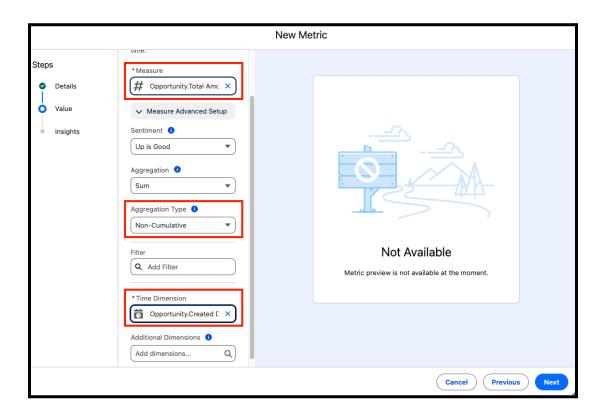


Pipeline Generation

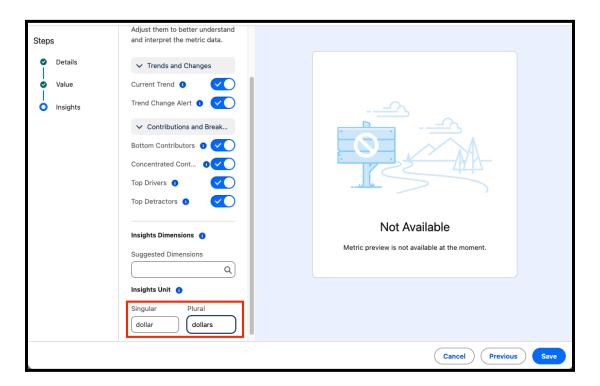
- 1. Click the "New" button in the upper portion of the left panel.
- 2. Select "Metric"
- 3. Name the metric "Pipeline Generation"
- 4. Set the description to "This metric reflects the amount of pipeline generated based on the day the opportunity was created."



- 5. Select the blue "Next" button in the bottom right corner
- 6. Select the "Measure" box and add "Total Amount"
- 7. Select the Measure Advanced Setup box to expand it and set the aggregation type to "Non-Cumulative"
- 8. Set the Time Dimension to "Created Date"



- 9. Select the blue "Next" button in the lower right corner
- 10. Set singular to "dollar" and plural to "dollars" (or your preferred currency)



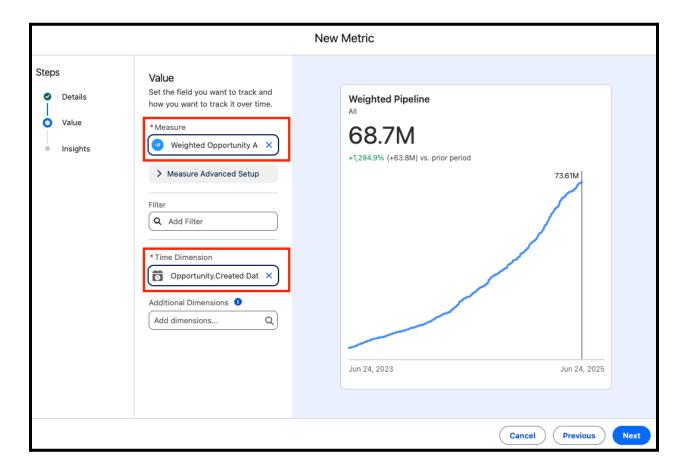
11. Click the blue "Save" button in the lower right corner

Weighted Pipeline

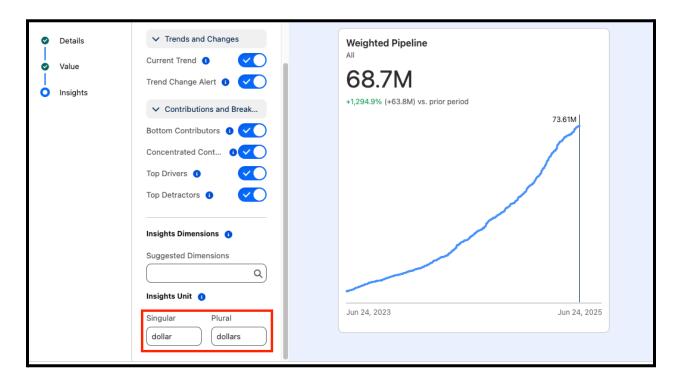
- 1. Click the "New" button in the upper portion of the left panel.
- 2. Select "Metric"
- 3. Name the metric "Weighted Pipeline"
- 4. Set the description to "This metric represents the weighted value of opportunities based on their created date."



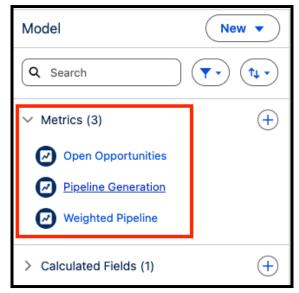
- 5. Select the blue "Next" button in the lower right corner
- 6. Select the Measure box and select "Weighted Opportunity Amount"
- 7. Set the time Dimension to "Created Date"



- 8. Click the blue "Next" button in the lower right corner
- 9. Set the Singular Insight Unit to "dollar" and the plural to "dollars" (or your preferred currency)



10. Click the blue "Save" button in the lower right corner. You should now have 3 Metrics in the Metrics section of your Semantic Data Model.



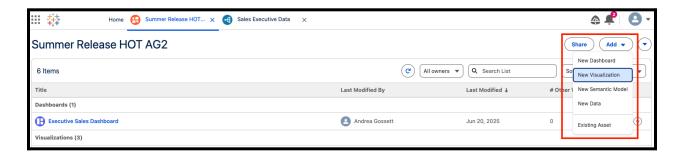
Build 5: Adding Visualizations

What you'll do in this build:	Create a bar chart and a donut chart to track the progress of opportunities through the stages as well as the relative contribution of Account Type to the pipeline.
The value of doing this build:	Building visualizations are a key component of analytics. Familiarity with basic bar and donut chart construction will allow you to develop additional visualizations in the future.
Tools used in this build:	Tableau Next Visualization Builder

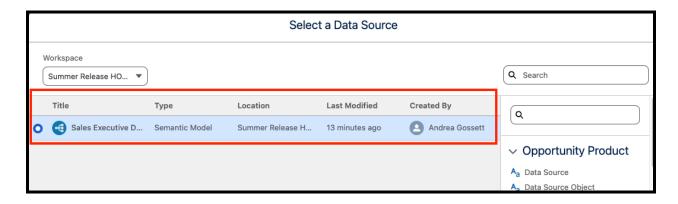
Build 5 Step-by-Step Instructions

Opportunity Stage

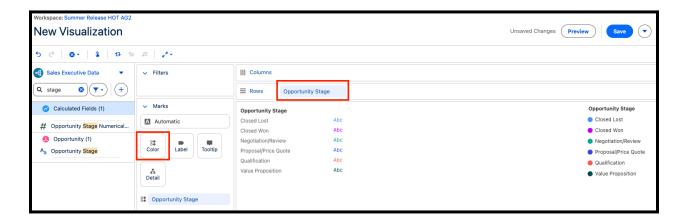
- 1. Navigate back to the Workspace by clicking on the tab inside of the Tableau Next window just under the URL that has the orange circle with white squares.
- 2. Select "Add" from the upper right corner and select "New Visualization"



3. Confirm that your Sales Executive Data data source is selected

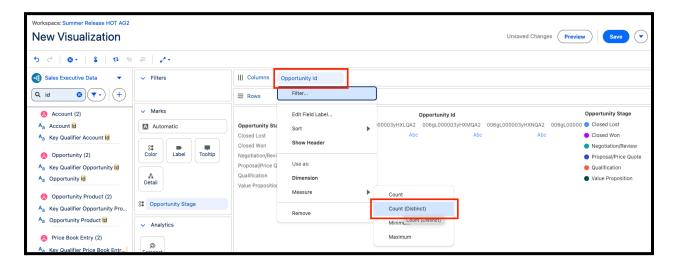


- 4. Choose the "Select" button in the lower right corner
- 5. Search in the left panel for "stage"
- 6. Drag "Opportunity Stage" from the left panel to the Rows shelf
- 7. Drag "Opportunity Stage" from the left panel to the Marks card "Color"



- 8. Search in the left panel for "ID"
- 9. Drag "Opportunity ID" from the left panel to the Columns shelf

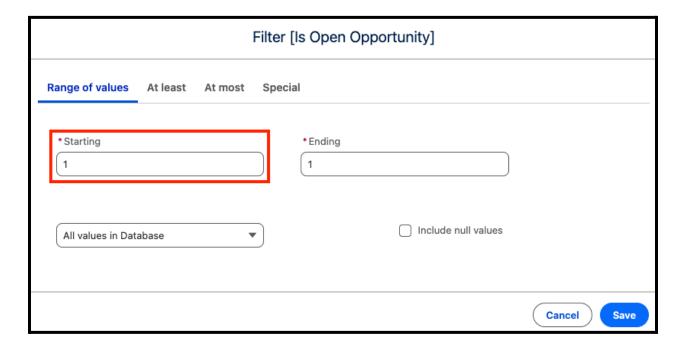
- 10. Hover over Opportunity ID in the Columns shelf and click the blue down arrow
- 11. Hover over Measure and select "Count (Distinct)" from the menu that appears



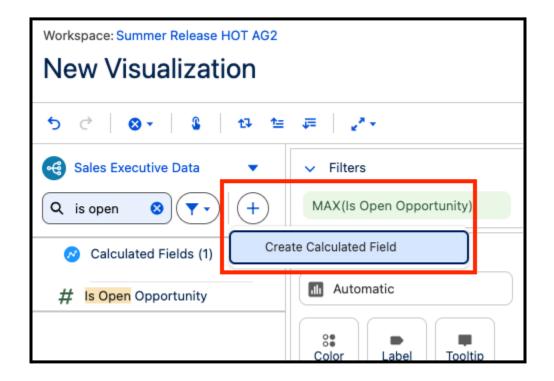
- 12. Search in the left panel for "Is Open"
- 13. Drag "Is Open Opportunity" onto the Filters card
- 14. Select Maximum



15. Set the **Starting Value** to **1** so that the range is 1 to 1 - representing open opportunities



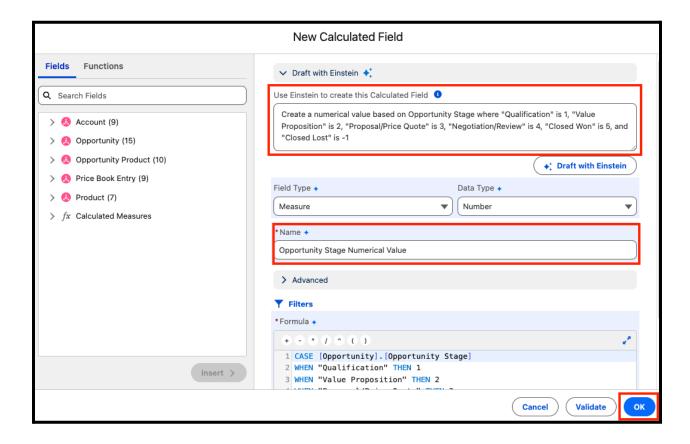
- 16. Select the blue "Save" button in the lower right corner
- 17. Select the plus in a circle button to the left of the Filters card
- 18. Choose "Create Calculated Field"



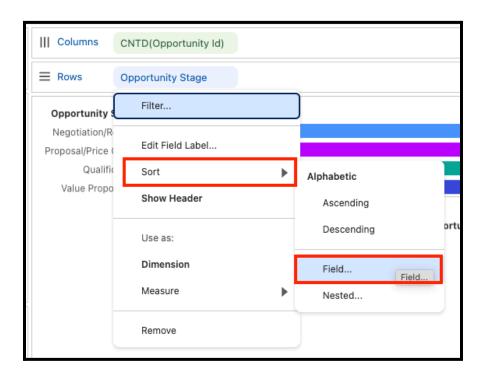
19. Create a numeric field that matches the Opportunity Stage by using Einstein to create a calculated field with the following information

Create a numerical value based on Opportunity Stage where "Qualification" is 1, "Value Proposition" is 2, "Proposal/Price Quote" is 3, "Negotiation/Review" is 4, "Closed Won" is 5, and "Closed Lost" is -1

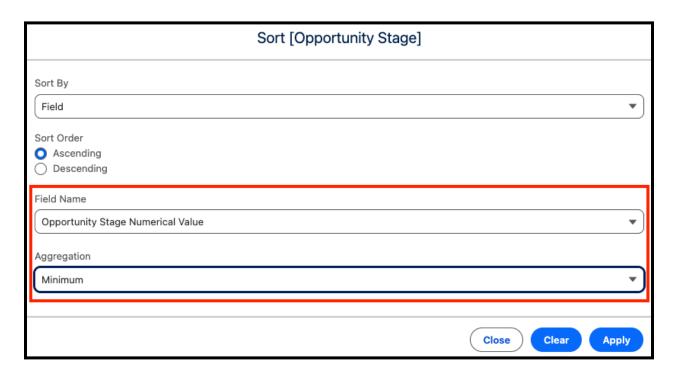
- 20. If necessary, set the Name to "Opportunity Stage Numeric Value".
- 21. Click the blue "OK" button.



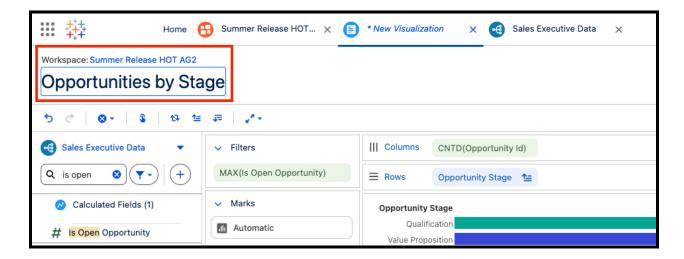
22. Hover Opportunity Stage in the Rows shelf, click the blue down arrow, and select "Sort" "Field"



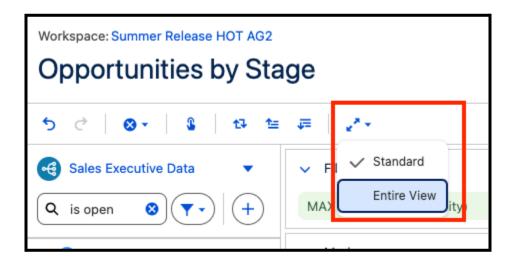
- 23. Set the Field Name to "Opportunity Stage Numeric Value"
- 24. Set the **Aggregation** to "Minimum"
- 25. Select the blue "Apply" button in the lower right corner



- 26. Click on the large "New Visualization" text in the upper left corner
- 27. Select the text and rename the Visualization to "Opportunities by Stage"



28. Click on the diagonal arrows over the Filters card and set the Fit to "Entire View"



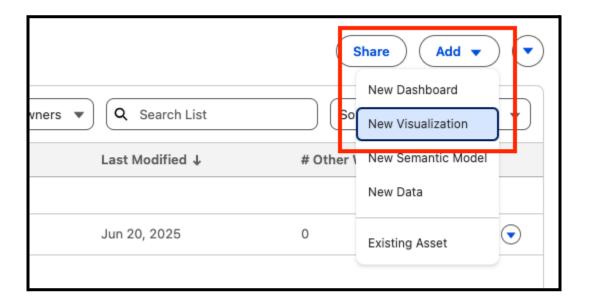
29. Hover over **Opportunity Stage** in the Marks card, then click on "**Show Legend**" to toggle the color legend off



- 30. Click the blue "Save" button in the upper right corner
- 31. Click on the "X" next to the Visualization tab (light blue circle with a bar chart) in the Tableau Next tab list under the URL to close the visualization editor.

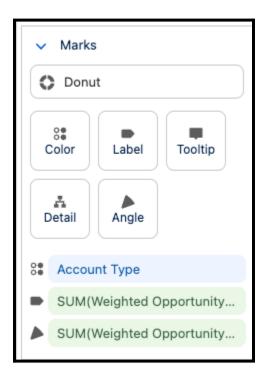
Opportunity Value by Account Type

- 1. If you are not on the Workspace view, navigate back to it by clicking on the tab inside of the Tableau Next window just under the URL that has the orange circle with white squares.
- 2. Select "Add" from the upper right corner
- 3. Select "New Visualization"



- 4. Confirm that your Sales Executive Data data source is selected
- 5. Choose the "**Select**" button in the lower right corner.
- 6. In the Marks card, click on "Automatic" and switch it to "Donut"



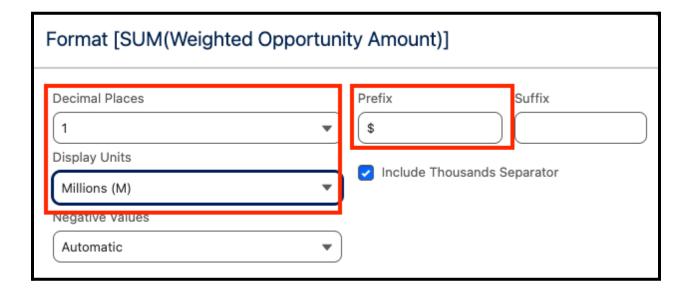


- 7. In the left panel, search "Account Type" and drag it to the Color Marks card.
- 8. In the left panel, search "Weighted Opportunity Amount" and drag it to the Angle Marks card.

- 9. From the left panel, drag "Weighted Opportunity Amount" to the Label Marks card
- 10. In the **Marks** card, click on the label version of **SUM(Weighted Opportunity Amount**, then click the down arrow to expand the options menu
- 11. Hover over Format Number and then select "Number (Custom)"

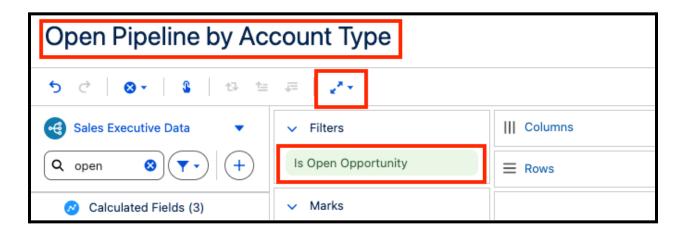


- 12. Use the following settings:
 - a. Decimal Places to 1
 - b. **Prefix** to "\$" (or currency icon of your choice)
 - c. **Display Units** to "Millions (M)"



- 13. Click the blue "X" in the upper right corner to close (no need to save)

 Note: The labels may not show up until you adjust the Fit in Step 18.
- 14. In the left panel, search "Is Open Opportunity" and drag that to the filter shelf.
- 15. Choose "All Values" and then select the blue "Next" button in the lower right corner
- 16. Set the **Starting** value to "1" and leave the **Ending** value at "1"
- 17. Click the blue "Save" button in the lower right corner.
- 18. Click on the diagonal arrows above the Filter card and set Fit to "Entire View"
- 19. Select the "New Visualization" text and rename the chart to "Open Pipeline by Account Type"



- 20. Click the blue "Save" button in the upper right corner
- 21. Click on the "X" next to the Visualization tab (light blue circle with a bar chart) in the Tableau Next tab list under the URL to close the visualization editor.

Build 6: Creating Dashboards

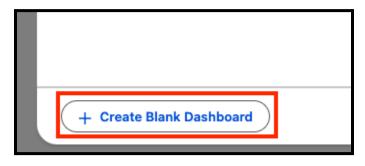
What you'll do in this build:	Combine Metrics and Visualizations into a dashboard.
The value of doing this build:	This introduces you to the way of organizing data on the dashboard screen and the concept of containers within Tableau Next.
Tools used in this build:	Tableau Next Dashboard Editor

Build 6 Step-by-Step Instructions

Add Metrics

- 1. Return to the Workspace view.
- 2. Select "Add" from the upper right corner and add a "New Dashboard"

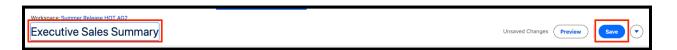




3. You'll see several templates, but select "Create Blank Dashboard" from the lower left corner.

- 4. Click on the large "New Dashboard" text, double-click to select the text, and rename the dashboard to "Executive Sales Summary"
- 5. Click the blue "Save" button in the upper right corner.

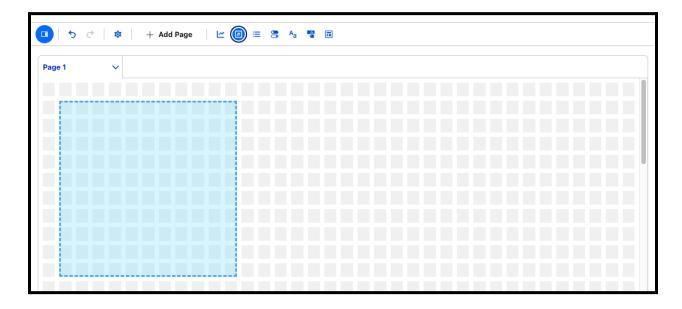
 Tip: Dashboards do not auto-save, so be sure to save your work frequently.



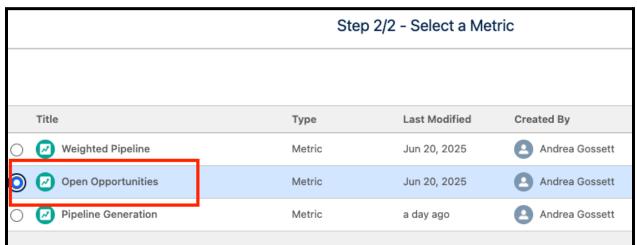
6. Below the title, select the square with a "#" inside of it (Metric).



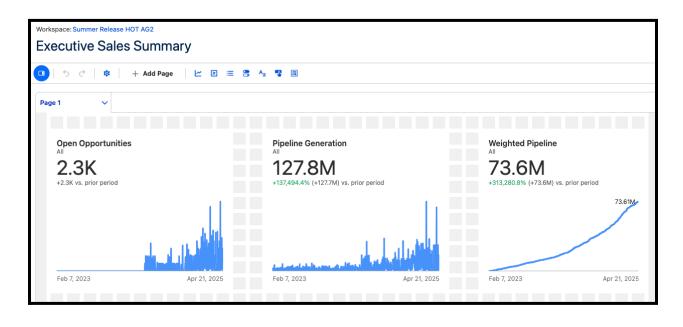
7. Bring your cursor over the design area to see the Metric box. Place it on the grid. *Tip*: We've got 3 metrics to add, and they fit nicely if you start in the first box on the left and then skip 2 boxes between each metric.



- 8. Click inside the box on "Add Metric", confirm that the Sales Executive Data SDM is selected, and then click "Select" in the lower right corner
- 9. Choose the "Open Opportunities" metric and then click "Select" in the lower right corner



- 10. Click the Metric icon under the Dashboard title again, this time adding "Pipeline Generation"
- 11. Add a third Metric, this time using "Weighted Pipeline"

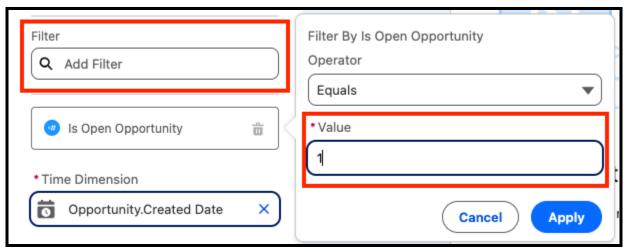


Adjust a Metric

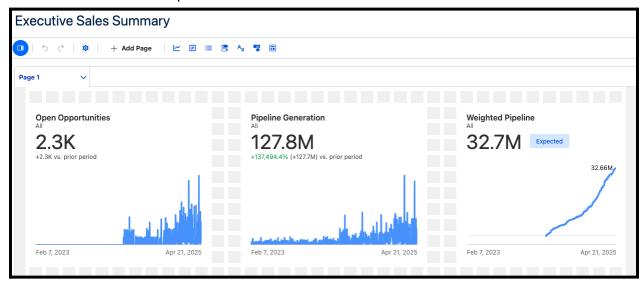
Oops - the value for the weighted average does not match what we're expecting from our quality control (73.6M vs 32.7M).

- Click "Save" in the upper right, then use the Tableau Next tab labeled "Sales
 Executive Data" with the blue nodes icon to navigate back to the Semantic Data Model.
- 2. Scroll up to the Metrics section and open "Weighted Pipeline". Click on the "Value" option under "Menu" and click on the "Add Filter" text box.
- 3. Search for "**Is Open Opportunity**" and click on it. Set the Filter to "**Equals**" and a value of "**1**" and click "**Apply**"

4.



- 5. Click "Save" in the lower right corner
- 6. Use the Tableau Next tabs to navigate back to the dashboard with the medium blue icon of a rectangle and two squares labeled "Executive Sales Summary"
- 7. Make sure that the "Save" icon is grayed out and refresh the page. Our metric should now match the expected value of **32.7M**



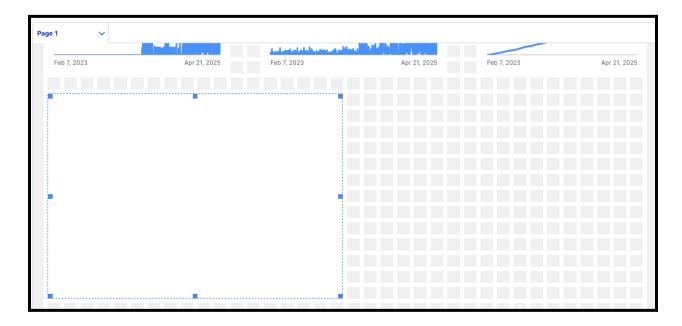
Adding a Container

To add additional options for our visualizations, we are going to place them inside of containers.

1. Select the last icon in the list of icons next to "Add Page" to select to add a Container.



- 2. Place the container box one block below the metric on the left hand side
- 3. Drag the middle blue box on the right over so that it overlaps the first 4 boxes of the middle metric.
 - *Tip*: This spacing isn't critical, so just get it approximately halfway across the page.
- 4. Drag the middle blue box on the bottom down three boxes.
 - **Tip**: this spacing isn't critical, just add at least 2 boxes worth of space



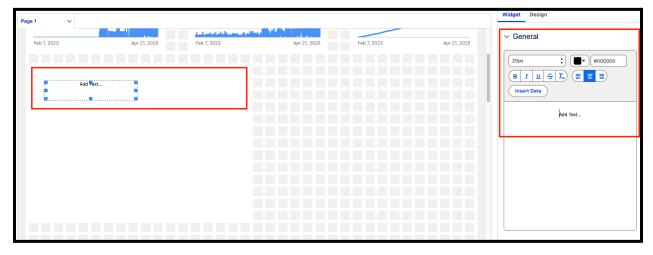
Adding a Title and Data to a Text Box

1. Select the Text icon in the row next to "Add Page" and place it in the upper middle of the container.

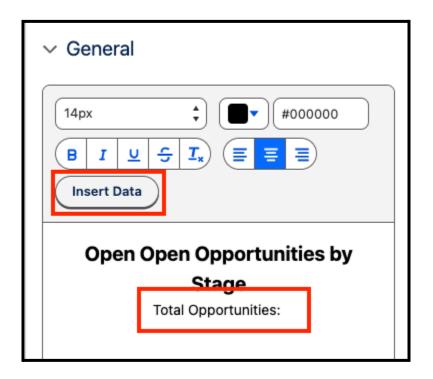


- 2. Use the panel on the right hand side to edit the text in the box
- 3. Set the font size to **20px**, set the style to "**Bold**," and click the **Center Text icon** to center it

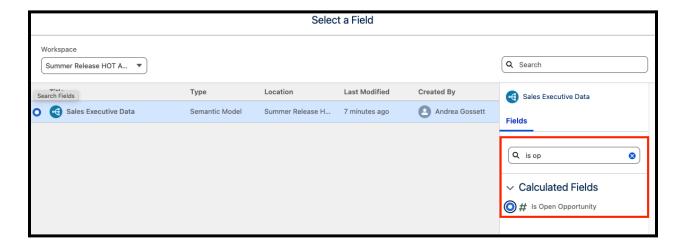
Tip: Setting the styling can be buggy. Delete all the text before you set the font styles or select all of the text you want and adjust the size up/down and toggle the settings until it's correct.



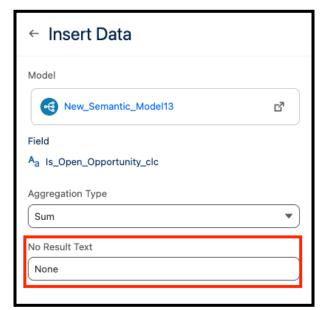
- 4. Set the text to "Open Opportunities by Stage"
- 5. Click enter to go to a new line, and set the font size to **14px**.
- 6. Type "Total Opportunities: " and then select the "Insert Data" button



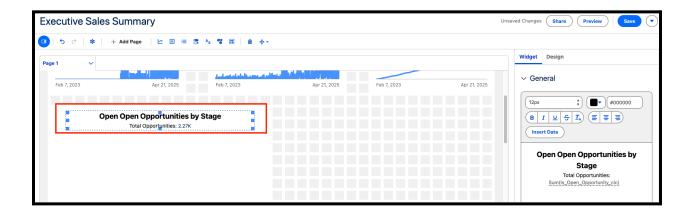
7. Confirm "Sales Executive Data" is selected for the data source, and then in the right panel, search "Is Open Opportunities" and select it. Confirm with the "Select" button in the lower right corner



- 8. The **Aggregation Type** is already set to **Sum**, so set the **No Result Text** to "**None**"
- 9. Click the blue "**Done**" button in the lower right corner.



10. Adjust the size of the Text box in the container to have the full text visible across two lines and centered.

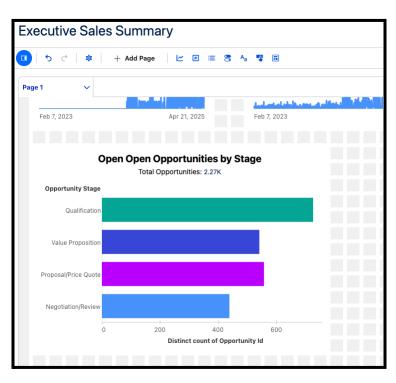


Adding a Visualization

1. Select the first icon next to "Add Page" to add a visualization.

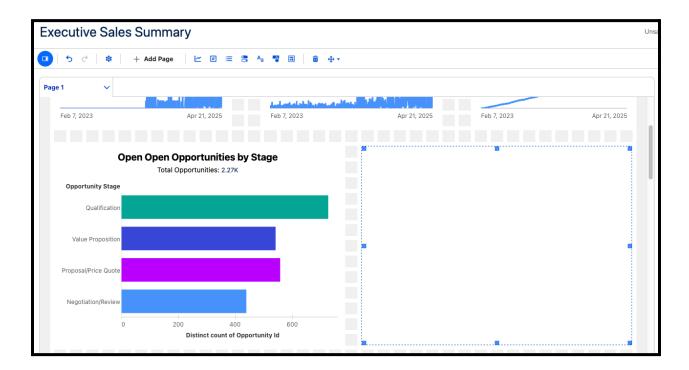


- Add the visualization box directly below the text block all the way to the left
- Resize the new box to the full width of the container
- Click on "Add
 Visualization" and select
 the "Opportunities by
 Stage" visualization. Click
 on the "Select" button in
 the lower right corner to
 confirm.

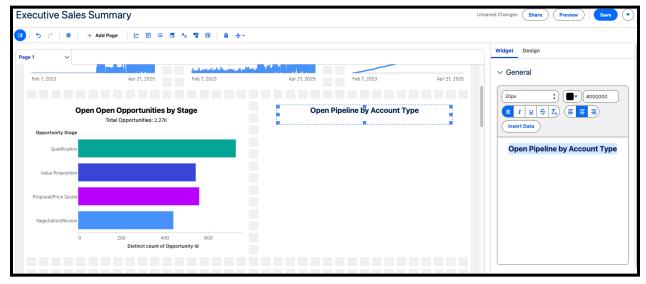


Adding a Second Container

- 1. Select the Container icon, and position it below the third metric in line with the first container.
- 2. Resize the container to match the first one.



3. Add a text box to the middle with the text "Open Pipeline by Account Type" in 20px font, making sure it's centered. Resize the text box inside the container if needed



4. Add a Visualization widget to the bottom of the container. Resize it to take up the rest of the space in the container

5. Click on the **Add Visualization** button in the new visualization widget and select the "**Open Pipeline by Account Type**" visualization. Confirm with the "**Select**" button in the lower right corner



6. Click "Save" in the upper right corner to save the dashboard.



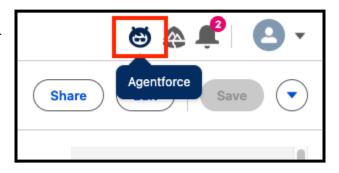
Build 7: Testing Concierge

What you'll do in this build:	Test Concierge performance and adjust as needed to ensure accurate answers, and extend/modify the SDM to adjust for unexpected questions.
The value of doing this build:	This will help highlight how you can make modifications to Tableau Next mid-development cycle to accommodate unexpected pivots in customer demands.
Tools used in this build:	Agentforce for Analytics, Semantic Models

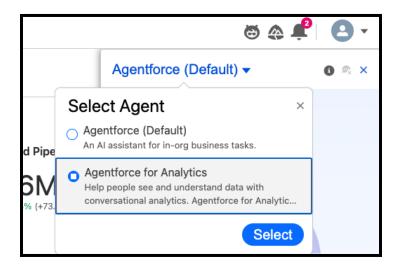
Build 7 Step-by-Step Instructions

Opening the Agent

- 1. Click "**Preview**" in the upper right corner to preview the dashboard.
- 2. Click on **Agent Astro** in the upper right corner to open up the Agent.



3. You should see "Analytics and Visualization" in the top of the newly opened panel, indicating you're using the correct Agent. If not, click on "Agentforce (Default)" at the top of the newly opened panel and toggle over to the "Agentforce for Analytics" or "Analytics and Visualization" agent. Click "Select" to confirm



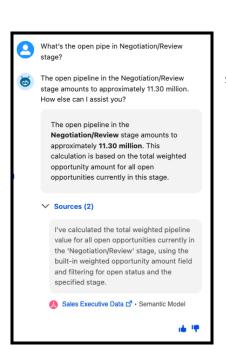
Testing the Agent

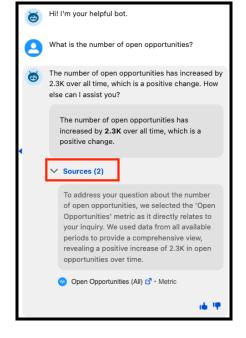
1. In the box at the bottom of the agent window, ask

What is the number of open opportunities?

Tip: If you don't see "Analyzing your data..." as the place holder response, make sure you see "Agentforce for Analytics" at the top of the Agent panel.

2. The agent should return a value of **2,266**. Click on "**Source**" below the response to audit the logic that the Agent used to return the result





3. Ask the agent something harder.

What's the open pipe in Negotiation/Review stage?

4. The agent should return 11,298,277.05

Tip: If the agent returns a different answer, it may not have used the weighted opportunity amount. Try asking the question again as "What is the open weighted pipeline in the Negotiation/Review stage?" We'll be adjusting the model to improve its decision making in future steps.

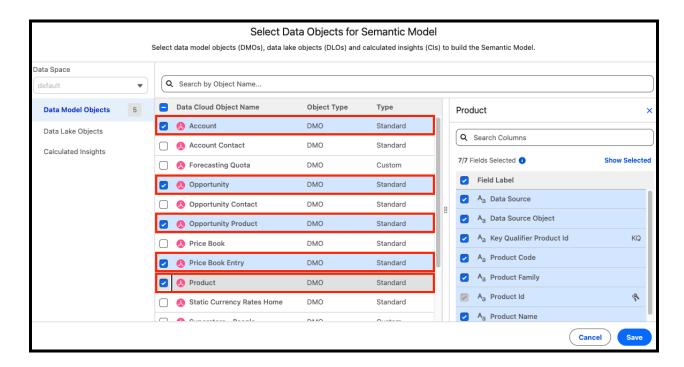
5. Now we're going to stump the agent:

Which product is contributing the most to our open pipeline?

- 6. The agent responds that it doesn't have access to a product field
- 7. Close the Agent panel

Refining the Semantic Data Model

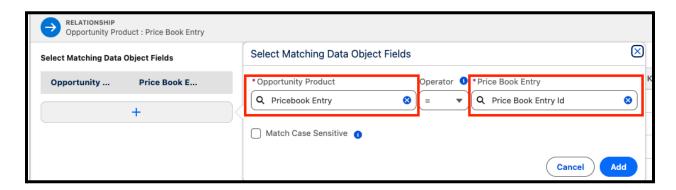
- 1. Navigate to the Semantic Model tab under the URL bar in your browser or access it via the Workspace if you've closed it.
- 2. Click on the "New" button in the left panel and select "Add Data Objects". We need to add Opportunity Product, Pricebook Entry, and Product. Select those three objects and select "Save"



- Define a relationship between Opportunity and Opportunity Product by hovering over Opportunity, selecting the "+" that appears, and dragging it over Opportunity Product
- 4. Click the "+" inside the rectangle in the left side of the Relationship panel that opens and set Opportunity **Opportunity ID** = Opportunity Product **Opportunity**
- 5. Click "Add" and then "Apply"



6. Define a relationship between Opportunity Product's **Pricebook Entry** and Price Book Entry's **Price Book Entry Id**. Remember to click "**Add**" and then "**Apply**"



7. Define a relationship where Price Book Entry **Product** = Product **Product ID**



8. Your final Semantic Model relationships should look something like this

9.



Testing the Update

- Go back to the Dashboard via the tabs at the top of Tableau Next or through the Workspace tab if you closed it. If it was still open, refresh the page.
- 2. Open the Agent via the Agent Astro icon in the upper right corner of the page.
- 3. Confirm that you're interacting with the Analytics and Visualization agent.
- 4. Try the question again:

Which product is contributing the most to our open pipeline?

 Concierge provides a response of Enterprise Formal and an opportunity amount of 6.3M.



Tip: Concierge is non-deterministic, so the values it returns at this step may be different depending on if it used Weighted Opportunity Amount or Total Amount. You can see which route it took by looking at the provided graph's X-axis or expanding the Sources section for more information.

Build 8: Revising the Semantic Model

What you'll do in this build:	Add additional information to the Semantic Model to help ensure accurate answers to unplanned questions.
The value of doing this build:	Understand how to adjust an existing model to account for user questions.
Tools used in this build:	Agentforce for Analytics, Semantic Models

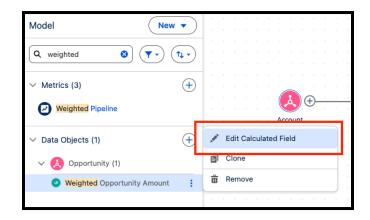
Going with a Trust-but-Verify approach, you build out a visualization to show the weighted opportunity amount by Product. (You do not need to actually do this, but you are welcome to).

While building the visual, you realize that the Weighted Opportunity Amount was never adjusted to allow for a product level breakdown of opportunity amount. We're going to go back and adjust that calculation now, as well as make some modifications to help ensure that Concierge consistently uses the Weighted Opportunity Amount field in its responses.

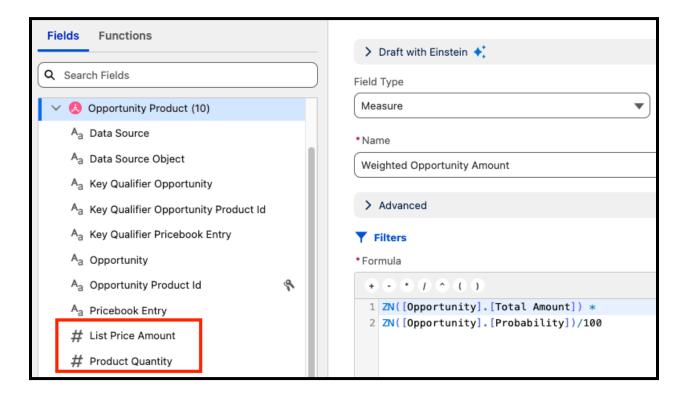
Build 8 Step-by-Step Instructions

Adjusting our Calculations

- Navigate back to the Semantic Model view and search for the "Weighted Opportunity Amount" field
- Select it in the left panel to open the Edit Calculated Field view



3. Expand the **Opportunity Product** DMO to see that there are fields for **List Price Amount** and **Product Quantity** in the Opportunity Product object. We can use these to create a more responsive Weighted Opportunity Amount calculated field.

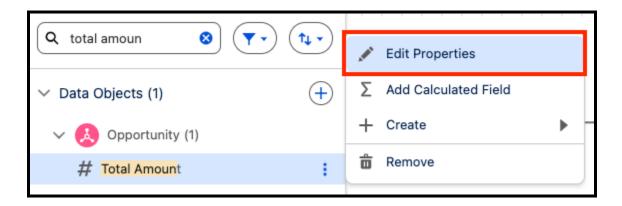


4. Replace the existing calculation with

ZN([Opportunity Product].[Product Quantity]) *
ZN([Opportunity Product].[List Price Amount]) *
ZN([Opportunity].[Probability])/100

- 5. Confirm your description states that this is the value to use when calculating the open pipeline amount
- 6. Click "**Validate**" to confirm the calculation is valid. Click "**Ok**" to update the calculation.

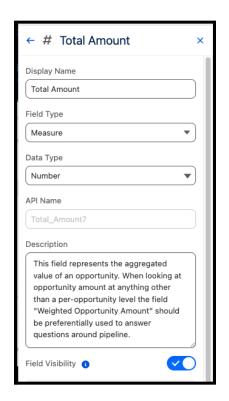
7. Search "Total Amount" and choose "Edit Properties"



8. Add the following Description to the field to further clarify which field should be used when calculating opportunity values.

This field represents the aggregated value of an opportunity. When looking at opportunity amount at anything other than a per-opportunity level the field "Weighted Opportunity Amount" should be preferentially used to answer questions around pipeline.

9. Click the blue "Apply" button.



10. Return to the dashboard.

Tip: If the Weighted Pipeline metric or the Open Pipeline by Account Type visualizations look wrong, click into them (double click to get just the visualization widget inside of the containers) and select the "Replace" option in the Widget panel on the right. Select the same metric/chart and confirm, and the visual should update.

11. Save your dashboard if needed and reload the page.

Testing The Adjustments

- 1. Open the Agent (no need to go to Preview mode) via the Agent Astro icon in the upper right corner.
- 2. Switch to the Agentforce for Analytics agent if needed by clicking on "Agentforce (Default)" and selecting the Agentforce for Analytics agent.
- 3. To make sure our Agent is performing correctly, ask

What's the total open pipeline by product?

4. Then ask the agent

Which product is contributing the most to our open pipeline?

- 5. You should now get a correct answer of **Enterprise Formal** with a weighted pipeline of around **5M**.
- 6. If you want, ask the same question 2-3 more times to confirm that Concierge is consistently using the Weighted Opportunity Amount field.

Congratulations, you've built a semantic data model, metrics, visualizations, dashboards, and tuned your data set to answer natural language questions from the end user.

One of the key takeaways from this Hands On Training Exercise is that Concierge requires testing and revision. When working with Tableau Next and the Agent, it's important to allow time for testing and revision.

The output of Agentforce for Analytics may look like magic, but it requires solid analytical and business knowledge to create that outcome for the end user.

Additional Resources

- Admin Website
- Developer Website
- Agentblazer Community
- Agentblazer Content Hub
- <u>5 Ways To Build Trustworthy AI Agents</u>
- How Salesforce Shapes Ethical AI Standards in the Agent Era
- Admin Website
- <u>Developer Website</u>
- Agentforce Decoded YouTube Admins
- Agentforce Decoded YouTube Developers
- Agentblazer Community
- Agentblazer Content Hub
- <u>5 Ways To Build Trustworthy AI Agents</u>
- How Salesforce Shapes Ethical AI Standards in the Agent Era

Dataset Descriptions

Accounts Receivable

The 'Accounts Receivable' datasource provides detailed information on the status of outstanding invoices, including estimated collection dates, payment terms, overdue amounts, and debtor information. This data can be used by finance departments to track and manage cash flow, monitor payment trends, and assess the creditworthiness of customers. The various fields in the datasource allow for analysis of invoice clearance rates, debtor behavior, and forecasting of future collections. Additionally, the drill-back feature provides a direct link to the source application for further investigation or action on specific invoices. Overall, this datasource offers valuable insights into the accounts receivable process and helps businesses make informed decisions to optimize their cash flow.

Bank Income Statement

The datasource 'Bank Income Statement' contains financial data related to the income statement of a bank, including information on branches, months, and various measures such as interest income and expenses, noninterest income and expenses, provision, loans, deposits, income taxes, and revenue. This data can be used to analyze the financial performance of the bank, track trends over time, compare the performance of different

branches, and make strategic decisions to improve profitability and efficiency. The data can also be used to create financial reports and presentations for stakeholders.

Business Travel Air

The datasource 'Business Travel Air' contains information related to air travel for business purposes. It includes data such as invoice dates, booking class, airline, destination country, ticket amounts, traveler details, travel start dates, booking dates, destination cities, total air spend, lowest available fares, online booking flags, and origin cities. The datasource also includes calculated fields for total air spend, total number of tickets, advance booking window, total number of travelers, total lowest fare, and the price difference between the ticket price and the lowest fare. This data can be used to analyze and track business travel expenses, optimize booking strategies, monitor traveler behavior, and assess cost-saving opportunities.

Call Center

The 'Call Center' datasource contains information related to customer calls received by a call center. It includes details such as the reason for the call, talk time, whether the call was abandoned, contact and customer IDs, wait time before the call was answered, date and time of the call, customer satisfaction rating, details about the customer and agent involved, inquiry and call numbers, whether the issue was resolved on the first contact, and the time taken to handle the call.

This dataset can be used by call center managers to analyze the performance of their agents, track customer satisfaction levels, identify common reasons for calls, monitor wait times, and assess overall call center efficiency. It can also help in identifying training needs for agents and improving customer service processes.

Chief Information Officer

CIO is a dataset that contains information related to the consumption of AWS resources by various product services within a company. It includes data on departmental usage, user creators, pod names, closed dates, Chief Information Officer oversight, regional distribution, customer satisfaction scores, categorization, metrics, intake channels, case IDs, sub-categories, date values, creation dates, budget ownership, and date transformations. This dataset can be used to analyze and optimize resource allocation, track budget expenditures, assess customer satisfaction, and monitor overall IT performance within the organization.

Chief Product Officer

The datasource named 'Chief Product Officer' contains data related to product activities within different theaters and industries. It includes information on the deployment of products across multiple sites, user roles, account statuses, and user interactions. This data

can be used to track product performance, user engagement, and industry trends. It can also help Chief Product Officers make informed decisions about product development, deployment strategies, and customer segmentation.

Donations

The 'Donations' datasource contains information related to donations received by a non-profit organization. It includes details such as the source of the donation, date of donation, type of donor, donation type, donor country, donation amount, and total donations received. The data also tracks the number of donors, gifts, appeals, and new donors. This information can be used to analyze fundraising efforts, donor demographics, donation trends, and the effectiveness of different fundraising appeals. The data can help the organization make informed decisions on donor engagement strategies, fundraising campaigns, and overall financial planning.

Education Admissions

The 'Education Admissions' datasource contains information related to admissions processes in the field of education. It includes data on the number of applications received, evaluated, admitted, rejected, and withdrawn for various academic programs within a department. Additionally, it tracks the number of enrolled students, both new and lost, as well as the number of invalid and valid applications. The data also includes information on the reporting date and academic period for each set of admissions.

This datasource can be used by educational institutions to analyze and track their admissions processes, identify trends in application acceptance and enrollment rates, and make informed decisions on program offerings and recruitment strategies. It can also be used to monitor the effectiveness of admissions policies and procedures, as well as to assess the overall success and competitiveness of the department's programs.

Email Marketing Campaigns

The datasource 'Email Marketing Campaigns' contains data related to various email marketing campaigns, including information such as the campaign name, date sent, total number of delivered emails, number of unique clicks, number of unique opens, total number of emails sent, total number of unique clicks, total number of opened emails, total number of unsubscribes, click-through rate, unsubscribe rate, and other relevant metrics. This data can be used to analyze the performance of different email marketing campaigns, track engagement metrics such as open and click rates, and optimize future campaigns for better results.

Financial Statement

The 'Financial Statement' datasource contains key performance indicators related to a company's financial health, such as total revenues, operating expenses, current assets,

current liabilities, total assets, total equity, and more. These indicators are broken down by month and categorized by specific KPI codes. The datasource also includes expressions for calculating total revenues, cost of revenues, operating expenses, current and non-current assets, liabilities, depreciation and amortization, interests and taxes, and other financial metrics. This data can be used to analyze the company's financial performance over time, identify trends, and make informed decisions regarding budgeting, investment, and strategic planning.

Fraud Management

The datasource 'Fraud Management' contains information related to fraudulent transactions, including the amount of fraudulent transactions, the outcome of those transactions, the date and time they occurred, the country of origin, and various indicators such as high-risk countries and rapid increases in volume. It also includes details about account and employment types, as well as a risk score assigned to each transaction. The data can be used to identify potential fraud flags, analyze patterns of fraudulent activity, and track the resolution time for flagged transactions. Additionally, it provides information on transaction IDs, currencies, and income brackets, which can help in investigating and preventing fraudulent activities.

Google Analytics

Google Analytics is a dataset that provides detailed information on user behavior and interactions with a particular website or online platform. It includes data on various metrics such as page views, bounce rates, unique page views, time on page, conversion rates, and sources of traffic. This dataset can be used to analyze the effectiveness of different marketing campaigns, track user engagement with specific pages or content, and identify patterns in user behavior based on factors like country, device category, and channel grouping. Marketers and website administrators can utilize this data to optimize their online presence, improve user experience, and drive conversions.

HLS Payer Claim Denials

The datasource 'HLS Payer Claim Denials' contains information related to claim denials from healthcare payers. It includes fields such as reception date, provider ID, denial status, provider name, diagnostic information, days of backlog, processing time, plan type, denial reason, ICD code, and current date. This data can be used to track and analyze trends in claim denials, identify common reasons for denials, monitor processing times, and assess the impact on healthcare providers.

HR Workforce

The 'HR Workforce' datasource contains information related to the workforce within a company, including details such as employee numbers, department, nationality, gender,

position, and entry dates. It also includes metrics such as headcount, occupation rate, and time to fill positions. The data can be used to track workforce demographics, turnover rates, and gender diversity within the organization. Additionally, it can help HR professionals make informed decisions regarding recruitment, retention, and organizational development strategies.

Heart of Marketing

The 'Heart of Marketing' datasource contains information related to marketing campaigns and lead generation efforts within a specific industry. It tracks various metrics such as campaign performance, marketing qualified leads, and average contract value. The data can be used to analyze the effectiveness of different marketing strategies, identify trends in lead generation, and assess the overall impact of marketing activities on sales pipeline and revenue generation. This dataset provides valuable insights for marketing teams to optimize their campaigns, target the right audience, and drive business growth.

Hospitality Rooms Revenue

The 'Hospitality Rooms Revenue' datasource contains information on revenue generated from rooms in the hospitality industry. It includes fields such as date, property, city, country, brand, rooms revenue, rooms sold, rooms available, total rooms revenue, total rooms sold, number of guests, total rooms available, occupancy rate, and average daily rate. This data can be used to analyze revenue trends, occupancy rates, and average daily rates across different properties, cities, and countries.

Insurance Claims

The 'Insurance Claims' dataset contains information related to various insurance claims, including details such as claim numbers, policy numbers, deductible amounts, claim process status, and reimbursement status. The dataset also includes information on the policy holder, agent group, policy type, and annualized premium amount. Additionally, it tracks important dates such as event date, open date, and close date for each claim. Users can analyze this data to gain insights into claim trends, claim status, reasons for claims, and overall claim processing efficiency. This dataset can be used by insurance companies to optimize their claims processing procedures, identify patterns in claim payments, and improve customer service.

Inventory

The 'Inventory' datasource contains information related to the inventory levels of various items in different warehouses. It includes details such as the country where the warehouse is located, the date of the inventory count, the scenario for the inventory count, the item family, the quantity of items on hand, the unit value of the items, and the total inventory

value. This data can be used to track and analyze inventory levels, monitor stock thresholds, and make informed decisions about inventory management and purchasing.

Marketing

The 'Marketing' datasource contains information related to various marketing campaigns, including details such as creative names, media spend, messaging, formats, publishers, and audience targeting. It tracks key metrics such as time on page, bounces, leads, conversions, unique pageviews, and sessions to measure the effectiveness of each campaign. The data also includes identifiers such as placement taxonomy, placement ID, campaign taxonomy, campaign ID, creative ID, and client information. This dataset can be used by marketing teams to analyze the performance of their campaigns, optimize their strategies, and make data-driven decisions to improve their marketing efforts.

Patient Record

The 'Patient Record' datasource contains information related to patient stays in a healthcare facility. It includes details such as the specialty of the doctor overseeing the patient, the services provided during the stay, discharge date and mode, length of stay, cost-weight associated with the Diagnosis Related Group (DRG), and patient admission details. This data can be used to track patient outcomes, analyze the effectiveness of different treatments and services, monitor healthcare costs, and optimize resource allocation in healthcare facilities.

Pharma Sales

The 'Pharma Sales' datasource contains information related to pharmaceutical sales, including details such as total prescriptions filled, prescription date, type of prescription, sales representative involved, healthcare provider, specific product sold, location (state, city, postal code), expected sales revenue, unique identifier, market share percentage, and provider ID. This data can be used to track sales performance, analyze market trends, monitor refill variance by state, and assess the effectiveness of sales accounts.

Power Grid Connections

The 'Power Grid Connections' datasource provides information on various requests related to power grid connections. It includes data on work centers, request types, completion status, request dates, expected and actual completion dates, and other relevant details. This data can be used to track the progress of power grid connection requests, monitor whether requests are completed within service level agreements, analyze average cycle times, and assess the overall efficiency of the power grid connection process. The data can help stakeholders make informed decisions and optimize the workflow for power grid connections.

Production Scraps

The 'Production Scraps' datasource contains information on the cost and quantity of production scraps, including the reason for the scrap, material category, plant, work center, and total processed cost. This data can be used to analyze the efficiency of production processes, identify areas for improvement in reducing scrap rates, and track the overall cost impact of production scraps on the business.

Purchasing

Purchasing is a dataset that contains information related to the purchasing activities within a trialverse system. It includes details such as the quantity of purchase orders, the items being purchased, the unit of measure, purchasing categories, the buyer responsible for the purchase, the supplier providing the goods or services, the date of the purchase order, the total amount of the purchase order, and the unique purchase order number. This dataset can be used to track and analyze purchasing trends, monitor supplier performance, and optimize procurement processes within the trialverse system.

Retail Banking - Consumer Underwriting Pipeline

The datasource 'Retail Banking - Consumer Underwriting Pipeline' tracks the progress of consumer loan applications through various stages of the underwriting process. It provides insights into the number of days each application spends in the pipeline, the specific stage of underwriting it is currently in, and the corresponding dates. This data can be used by retail banking institutions to monitor the efficiency of their underwriting process, identify bottlenecks, and make informed decisions to streamline operations and improve customer experience. It can also help in forecasting loan approval timelines and optimizing resource allocation within the underwriting department.

Retail Banking - Loan Performance

The 'Retail Banking - Loan Performance' dataset provides information on the performance of loans within a retail banking environment. This dataset includes details such as loan fees, start and end dates of loans, underwriting stages, total loan interests, pricing spreads, borrower information, branch locations, and whether a loan is in default or not. This data can be used by financial institutions to analyze the profitability and risk associated with their loan portfolios, track the performance of individual loans over time, and identify trends in loan origination and repayment. It can also help in assessing the effectiveness of underwriting processes and the performance of different branches or teams within the organization.

Retail Cosmetic

The 'Retail Cosmetic' datasource contains information related to customer satisfaction, loyalty segments, churn rates, and sales channels for a cosmetic retail company. It includes

data on customer satisfaction scores, loyalty segment classifications, churn rates, and whether purchases were made in-store or online. The data also includes information on the region and country where the transactions took place. This dataset can be used to analyze customer behavior, identify trends in sales channels, and assess customer satisfaction levels to make informed business decisions and improve overall performance in the cosmetic retail industry.

Retail Electronics

The 'Retail Electronics' datasource contains information related to purchases of electronic products from a retail store. It includes details such as customer demographics, product categories, premium purchases, return reasons, payment types, order details, inventory units, pricing information, discounts, gross margins, shipping information, and customer and product identifiers. This dataset could be used by retailers to analyze customer behavior, track sales performance, identify popular products, optimize pricing strategies, manage inventory levels, and improve overall customer satisfaction and retention. Additionally, it can help retailers understand return patterns, shipping times, and customer preferences to make more informed business decisions.

Retail NTO

The 'Retail NTO' datasource contains information related to sales transactions for a retail company named Northern Trail Outfitters. The data includes details such as the order placed date, category, sales amount, state, customer information, premium status, product name, discount applied, product type, carrier used, units sold, return flag, order ID, gross margin, shipping type, returns processed, payment type, percentage discount, customer ID, and product ID.

This dataset can be used for various purposes such as analyzing sales performance, tracking customer behavior, identifying trends in product sales, monitoring returns and discounts, and evaluating the effectiveness of different payment and shipping methods.

Retail Store Operations

The 'Retail Store Operations' datasource contains information related to the financial and operational aspects of a retail store. It includes data on margins, pricing, inventory management, sales, shrinkage rates, and stock levels. This data can be used by store managers and analysts to track the performance of the store, optimize pricing strategies, manage inventory levels, and identify areas of improvement to increase profitability. By analyzing this data, retailers can make informed decisions to enhance their overall operations and drive business growth.

SaaS Adoption

The 'SaaS Adoption' dataset likely contains information related to the adoption rates of a software as a service (SaaS) product called Trialverse across different regions, industries, company sizes, and tiers. It includes data on the date of adoption, unique identifiers, company names, revenue generated, module usage, and uptime of the software. This dataset can be used to analyze trends in SaaS adoption, identify key factors influencing adoption rates, and tailor marketing strategies to target specific regions or industries with higher adoption rates. Additionally, it can help companies understand the relationship between adoption rates and revenue generation, as well as the impact of uptime on customer satisfaction and retention.

Sales Cloud

Sales Cloud is a datasource that provides information on sales opportunities within different industries. It includes data on close dates, opportunity owners, types of opportunities, account names, opportunity IDs, amounts, whether the opportunity is closed or won, the stage of the opportunity, the billing country, expected amounts, whether there is a Standard Industrial Classification (SIC) code associated with the opportunity, forecast categories, account IDs, opportunities won, annual revenue, opportunities closed, value, and opportunity scores.

This data can be used to analyze sales performance, track the progress of opportunities, and identify trends within different industries and regions.

Sales and Margin

The 'Sales and Margin' datasource contains information related to sales and margins, including order dates, sales amounts, customer details, business lines, sales margins, total sales, products, sales quantities, active and new customers, average selling price, and sales amount targets. This data can be used to analyze sales performance, track margins, identify trends in customer behavior, monitor sales targets, and measure the effectiveness of different business lines.

Salesforce Field Service

The datasource 'Salesforce Field Service' contains information related to incidents and dispatches handled by a field service team. It includes data such as incident numbers, dates and times, types of incidents, time to dispatch, time to arrival, agent assigned, and station zip codes. The data can be used to track the efficiency and performance of the field service team, monitor incidents within service level agreements, analyze response times, and identify areas for improvement.

Service Desk

The 'Service Desk' datasource contains information related to customer support cases. It includes details such as case numbers, priorities, open and close dates, users involved,

agents assigned, case statuses, descriptions, service desk information, categories, agent groups, and relevant dates. This data can be used to track and manage customer inquiries and issues, monitor response times, assign tasks to agents, prioritize cases based on urgency, and analyze trends in customer support interactions. It can also help improve overall customer satisfaction and streamline support processes.

Superstore

The 'Superstore' datasource contains information related to sales and profits of a retail superstore. It includes data such as order dates, profits, sales, categories, sub-categories, customer segments, product names, order IDs, discounts, regions, customer names, cities, shipping modes, quantities, shipping dates, countries, regional managers, postal codes, and total sales. This data can be used for various analyses such as profit analysis, sales performance evaluation, customer segmentation, and regional sales comparisons.

Supply Chain Intelligence Inventory

The 'Supply Chain Inventory' dataset contains information related to product inventory levels, pricing, and supply chain management. It includes data on product codes, on-hand quantities, unit prices, safety stock levels, and inventory scenarios. This dataset can be used to track and manage inventory levels, monitor product movement in and out of warehouses, analyze product categories, and assess supply chain intelligence. The data also includes information on warehouse locations, cities, and countries, allowing for geographical analysis and optimization of inventory distribution. Overall, this dataset provides valuable insights for businesses looking to streamline their supply chain operations and optimize inventory management processes.

Supply Chain Intelligence Sales

The 'Supply Chain Sales' datasource contains information related to sales within a supply chain, including order dates, sales figures, customer satisfaction scores, unit prices, requested and confirmed quantities, delivery details, defect quantities, delivery costs, product categories and codes, and geographic coordinates. This data can be used to analyze sales performance, track delivery efficiency, monitor customer satisfaction, and identify trends in product demand and distribution. Workbooks utilizing this data can provide insights into supply chain operations, help optimize inventory management, and support decision-making processes for improving overall sales and delivery performance.

Telecom - Network Health

The 'Telecom - Network Health' datasource contains information related to the health and performance of a telecommunications network. It includes data on different seasons, markets, revenue impact, network impact categories, states, network segment IDs, weather severity types, network impacts, date events, and weather severities. This data can be used

to analyze the overall health of the network, identify any issues or disruptions, and assess the impact of weather events on network performance.

Telecom - Sales Market

The 'Telecom - Sales Market' dataset contains information related to sales and market trends in the telecommunications industry. It includes data on payment dates, lines, states, markets, phone types, channels, countries, prepaid indicators, network statuses, service types, network types, cities, number of lines, activity dates, and fixed wireless access gross adds. This dataset can be used by telecom companies to analyze sales performance, track market trends, and make strategic decisions regarding product offerings, marketing strategies, and network expansion. It can also help identify opportunities for growth and areas for improvement in the telecom sales market.

Trading

The 'Trading' datasource contains information related to various trades within the financial services industry. It includes data such as the type of trade, client details, sector information, trade dates, trader names, trade volume, trade amounts, total revenue, number of trades, number of clients, and average commission rates.

This data can be used to analyze and track trading activities, monitor revenue generation, assess client relationships, and evaluate the performance of traders. It can also help in identifying trends, patterns, and opportunities within the trading sector. The information can be utilized to make informed decisions, optimize trading strategies, and maximize profitability. The dataset can be particularly beneficial for financial professionals and analysts working in the trading industry.

Wealth Asset Management

The datasource 'Wealth and Asset Management' contains information related to clients, their assets under management (AUM), financial performance, and attrition rates. The data includes details such as client type, join date, Net Promoter Score (NPS), last touch point, market segment, total attrition, AUM breakdown, appreciation amount, money outflow, client counter, advisor details, annual income, and client ID.

This data can be used to analyze and track the performance of clients, identify high-risk clients, monitor attrition rates, and assess the overall financial health of the wealth and asset management business. The dataset can also be used for predictive modeling and machine learning algorithms to forecast client behavior and optimize business strategies.