SNOWFLAKE GEN AI and LLM
Escape Room 2

FINAL MISSION
Board Business Presentation

Business Value Presentation for the Board

Prepare a business presentation.
Present the outcomes of the missions from a business perspective,
choosing a specific business persona in the organization as your audience.

01 Demonstrate the business value you've delivered and emphasize the compelling reason to act.

Convince why Snowflake is the ideal solution to address the business challenge you've identified.

WHO IS TASTY BYTES?

ABOUT US: Global food truck network, localized menu options, 15 countries, 30 major cities, and 15 core brands.

OUR MISSION

We serve to give people unique food options with high quality items in a safe, convenient and cost effective way. We ensure that the ingredients used are of the highest quality from mostly local food vendors to make sure our success has a positive impact on community partners.

OUR VISION

To become the largest food truck network in the world by 2027 that has sustainable profitability with a zero carbon footprint future that our team, customers, and communities are proud of supporting.

LOCATIONS SERVED

- USA: San Mateo, Denver, Seattle, Boston, New York City
- Canada: Toronto, Vancouver, Montreal
- United Kingdom: London, Manchester
- France: Paris, Nice
- Poland: Warsaw, Krakow
- India: Mumbai, Delhi
- Japan: Tokyo
- South Korea: Seoul
- Australia: Sydney, Melbourne

CURRENT STATE & FUTURE GOALS

	current		future
Trucks	450	20% YoY growth over 5 years	1120
Sales	$105M/year	25% YoY growth over 5 years	$320M/year
NPS	3	Improvement by YE 2023	40

frostbyte.

Business Overview

ORDERING SERVICE

navigating through the menu options available to the customer. Once ready, they select the items they want to order.

PAYMENT PROCESSING

customers can now pay with their saved selected payment method as part of their profile.

ORDER FULFILLMENT

*Orders are placed in a queue, driver can prioritize each order.*

+1

+1

+1

CUSTOMER FEEDBACK

Voice of customer is captured through web, mobile and CSR apps capturing the customer's experience and happiness with Tasty Bytes which is used to improve truck operation in the future.

GEO LOCATION SERVICES

Sales data is captured through online order or POS for each truck at a given location. We can then determine where trucks should park in the future to maximize sales based on previous history, weather, and time of day (AM/PM)
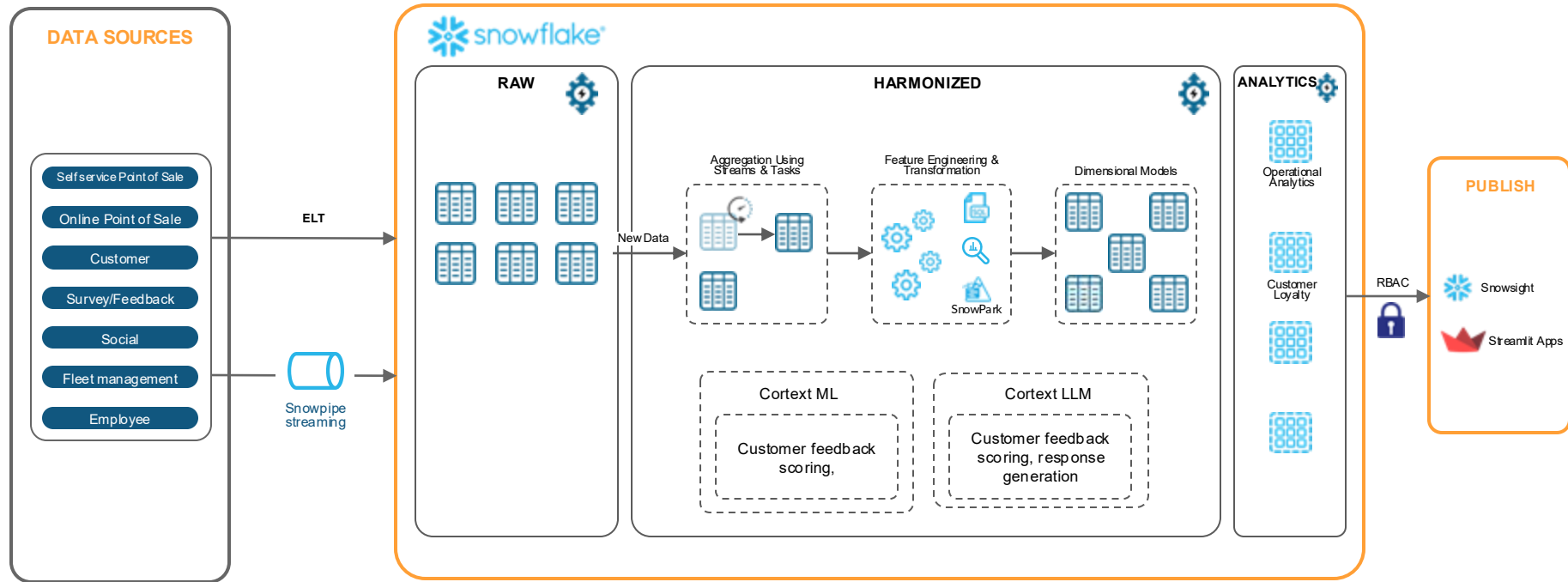
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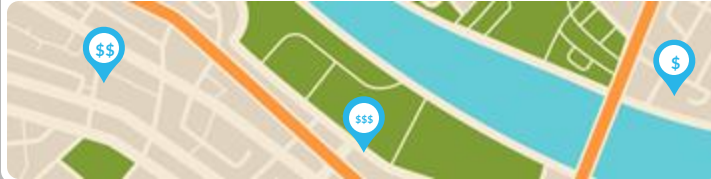
DRIVER APP

Truck Owner/ Operators have access to a complete 360 view of the order process via a specialized app

ORDER READY

Tasty Bytes Mission Architecture

DATA SOURCES

- Self service Point of Sale
- Online Point of Sale
- Customer
- Survey/Feedback
- Social
- Fleet management
- Employee

ELT

Snowpipe streaming

snowflake

RAW

New Data

HARMONIZED

Aggregation Using Streams & Tasks

Feature Engineering & Transformation

Dimensional Models

SnowPark

Cortext ML

Customer feedback scoring,

Cortext LLM

Customer feedback scoring, response generation

ANALYTICS

Operational Analytics

Customer Loyalty

RBAC

PUBLISH

Snowsight

Streamlit Apps

MISSION #0
GET READY !

ENVIRONMENT SETUP

Setup Snowflake Trial Instance

01   Sign in for a trial : https://signup.snowflake.com/ .

02   Only one trial is needed per team.

03   Use **Enterprise Edition.**

04   Select **AZURE** for the Cloud Provider and the **West US 2 (Washington).**

05   After registration, you will receive an email with an activation link and your Snowflake Account URL.

Create New Account

Each account in your organization will have its own set of users, roles, databases, and warehouses.

Cloud

Microsoft Azure ⌄

Region

West US 2 (Washington) ⌄

Edition

Enterprise - $3 Credit, $23 TB ⌄

You will be billed for usage in all of your accounts on a single bill. The current rates displayed are standard list prices and may not reflect any discounts you may have.

Learn more about **Snowflake editions**.

Cancel   Next

Environment Description

You have been provided with a .zip file containing all the artefacts for the missions which contains the following folders:

- data (contains some folders)
- missions (if available, artefacts to start your mission)

https://drive.google.com/drive/folders/1n0icPdMeu3YPWFzITW-pWmezcJt6rhKe?usp=drive_link

There are also some files that you will use that are located at the root of the folder.

Snowflake Set Up

06 Create users for your team
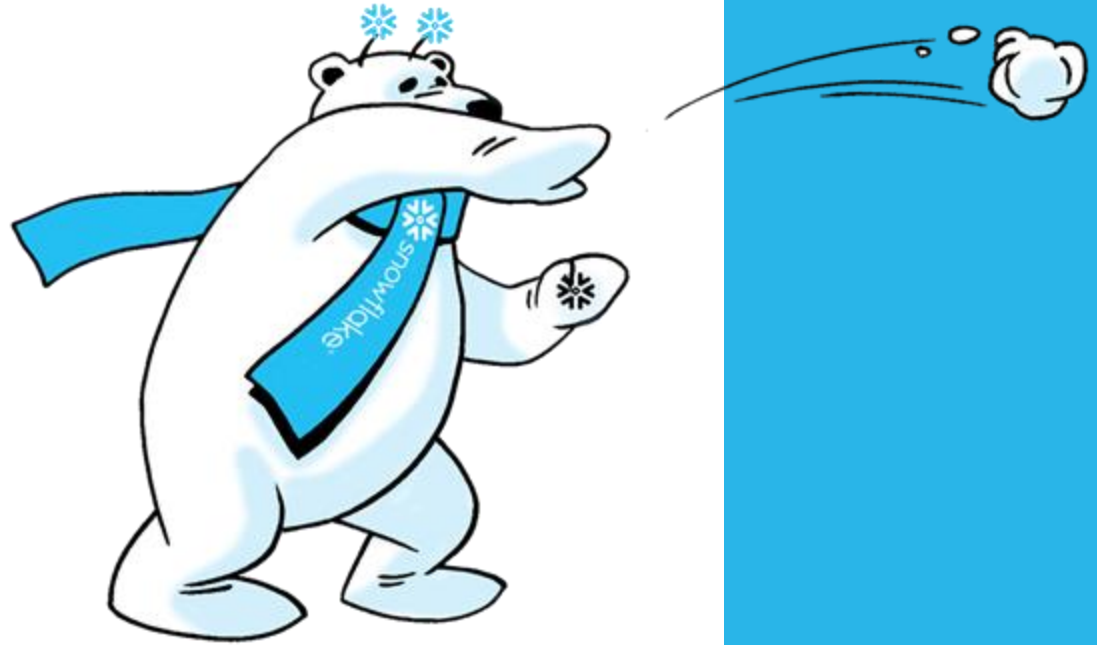
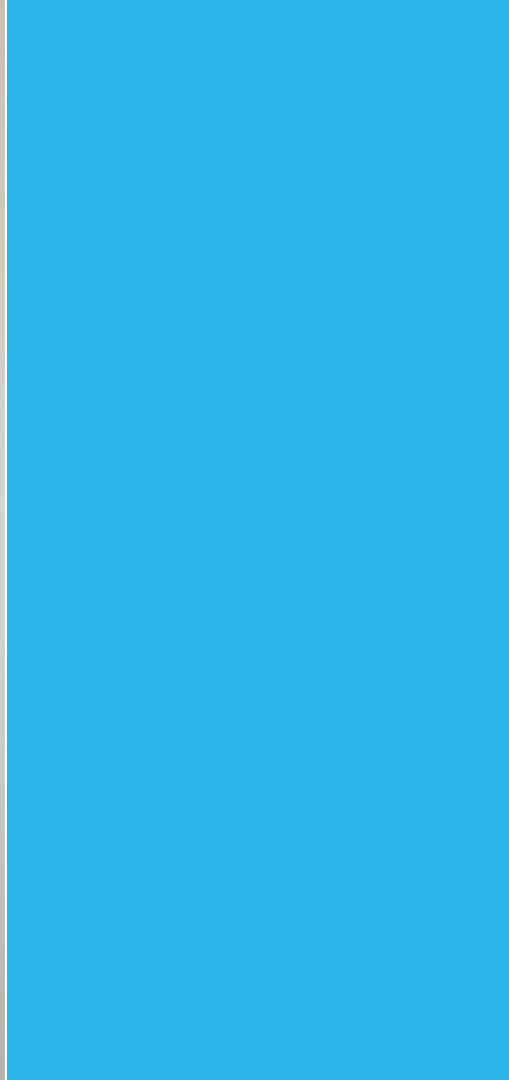**07** Create notebook per mission (Best Practice)

NEW

**Food Delivery
Service**

MISSION #1
Call Center

The New Delivery Service manager has swooped in with an exciting new initiative! 💥

A food ordering is launching soon, with a strong focus on accessibility for people with disabilities and senior citizens,
And we will also have a new telephone-based ordering channel

To ensure this new delivery service succeeds, she wants to analyze customer sentiment from the calls, derive key insights, and act on them. 💥💬

To kick off the feasibility study, she has provided several sample calls.
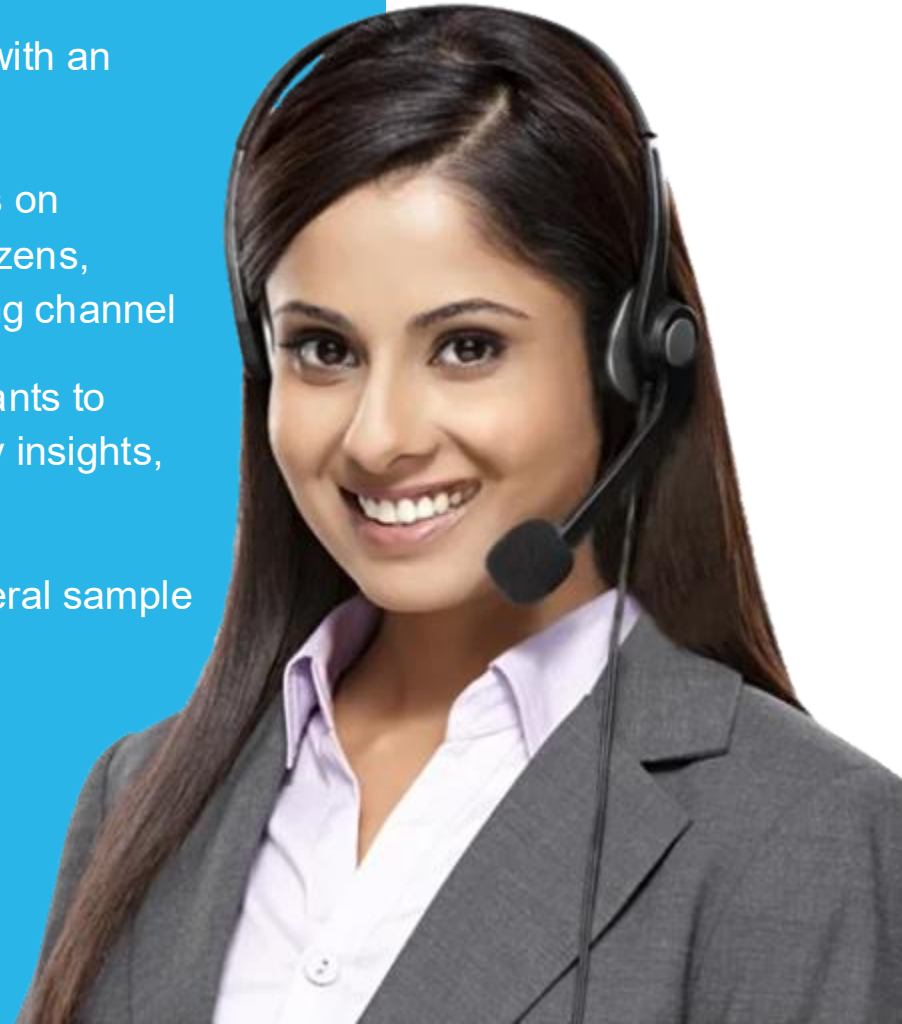
What do you need to do?

As a rockstar Data Engineer

Your Task is to **Load the Audio files from the AUDIO_FILES data folder to snowflake internal stage.**
Create "Calls_analysis" table where each row is a call,
displaying the following data:

- Full Call Transcript
  Sentiment Analysis:
  - Numerical Score
  - Category: 'POSITIVE', 'NEGATIVE', 'NEUTRAL'
- Call Summary
- Food ordered
- Drink ordered
- Number of items in the order
  Order Price
- Estimated Arrival Time

01

Global Currency Conversion

Global Currency Conversion using the Snowflake Marketplace

The restaurant plans to open ordering channels in different countries, ther menu prices mentioned in the calls are in local currency 💥 💬

Use up-to-date currency exchange rate data from the Snowflake Marketplace to convert the total order price.

What do you need to do?

As a rockstar Data Engineer

Your task is to create a view that shows "order_price" in USD currency based on latest exchange BID rate from Marketplace to convert order prices currency.

Access the Data: Use the currency exchange rate data from the Snowflake Marketplace - **Currency Exchange Rates** `Tradermade-currency-exchange-rates`.

The data is available via the link :
https://app.snowflake.com/marketplace/listing/GZTDZKQYWW/tradermade-currency-exchange-rates?search=currency
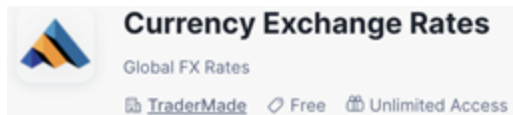
01

Perform the Conversion add "Currency_Conversion" column to the "calls_analysis" table that include the text "**EUR to USD**"

Present the Result: Create a `view or dynamic table` that semantically join the "Calls_analysis" table with the `currency-exchange-rates`.
The `view \ dynamic table` will Display the "Food ordered ", "Order Price", "Currency_Conversion" column and "inst" column from `currency-exchange-rates` DB and a new calculated column "Price_in_USD".
Perform a "semantic similarity" between `Currency_Conversion` and `inst` column,

Upon completion

01 Contact the Snowflake board to Present your results

02 Receive the next mission.

Snowflake Escape Room 2 - GET READY !