



# Leveraging CRM Data : To Understand Customer Behavior and Marketing Effectiveness

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# Outline

1. Overview
2. Data Understanding
3. Customer Analysis
4. Marketing Analysis
5. Strategic Recommendation

# Overview

## Business Background

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In early 2012, Sunrise Supermarket began introducing a structured system to record essential customer data: demographic information, purchasing activities, promotional campaign engagement, complaints, and purchase channels. At first, the system was built mainly for operational purposes — simple bookkeeping, monthly summaries, and inventory checks.

However, as the years passed, the volume and quality of data grew significantly. By 2015, the London headquarters recognized the **strategic value** of this information and brought in a **dedicated data analyst** to turn raw records into actionable insights. What began as an operational tool was now evolving into a **data-driven growth engine**.



## Problem Statement

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- **Low Marketing Campaign Engagement**

Many customers do not respond to or accept campaign offers, revealing a gap between marketing tactics and actual customer behavior. This results in ineffective promotions and lost growth opportunities.

- **Lack of Customer Segmentation Strategy**

Although Sunrise has rich CRM data, it lacks a clear segmentation framework. Without behavioral and demographic segmentation, marketing stays broad and generic, limiting precision and impact.

- **Inefficient Marketing Resource Allocation**

Current campaigns target the entire customer base instead of high-potential segments.





***“How can CRM insights be used to drive solutions to these issues?”***



# What is CRM?

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**CRM (Customer Relationship Management)** is a system and strategy used to **collect, manage, and analyze customer information** — such as demographics, purchase history, and engagement with campaigns.

For a **supermarket business**, CRM helps to:

- Understand customer behavior and preferences.
- Personalize promotions and offers.
- Improve customer service and in-store experience.
- Build loyalty and increase repeat purchases.
- Support smarter, data-driven business decisions.



## Stakeholders

As Sunrise Supermarket grew, the CEO formed a **CRM Force**—a unified team of **marketing**, **store managers**, **customer service** and all supported by a **data analyst**. This team connects campaigns, sales, and feedback to turn customer interactions into actionable insights, enabling smarter decisions and a stronger retail ecosystem.





# Data Understanding

# Data Dictionary

Here are the data dictionary details from the cleaned dataset (2012–2014), providing a clear overview of each variable and its definition. This serves as a foundation for understanding the dataset's structure and guiding the subsequent analysis.

## People

**ID:** Unique customer identifier.  
**Year\_Birth:** Year of birth of the customer.  
**Age / Age\_Group:** Customer's current age and age category.  
**Education:** Customer's education level.  
**Living\_Status:** Living arrangement or status.  
**Income:** Annual income of the customer.  
**Dependents:** Number of dependents.  
**Parental\_Status:** Indicates if the customer has children.  
**Family\_Size:** Total household size.  
**Dt\_Customer:** Date of first purchase or enrollment.  
**Complain:** Whether the customer made a complaint.  
**Recency:** Days since last purchase.

## Place

**Web\_Purchase:** Number of website purchases.  
**Catalog\_Purchase:** Number of catalog purchases.  
**Store\_Purchase:** Number of in-store purchases.  
**Web\_Visit\_Month:** Website visits per month.

## Product

**Wine:** Spending on wine products.  
**Fruit:** Spending on fruit products.  
**Meat:** Spending on meat products.  
**Fish:** Spending on fish products.  
**Sweet:** Spending on sweets.  
**Gold:** Spending on gold or luxury products.

## Promotion

**Deals\_Purchase:** Number of purchases made using deals or discounts.  
**Campaign1:** Response to Marketing Campaign 1.  
**Campaign2:** Response to Marketing Campaign 2.  
**Campaign3:** Response to Marketing Campaign 3.  
**Campaign4:** Response to Marketing Campaign 4.  
**Campaign5:** Response to Marketing Campaign 5.  
**Latest\_Campaign:** Response to the most recent marketing campaign.

# Customer Analysis

# Demographic

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**31,5%** of customers are between **35–44 years** old

**64,5%** are living together with their partner.

**39,7%** customers come from **3-person** household.

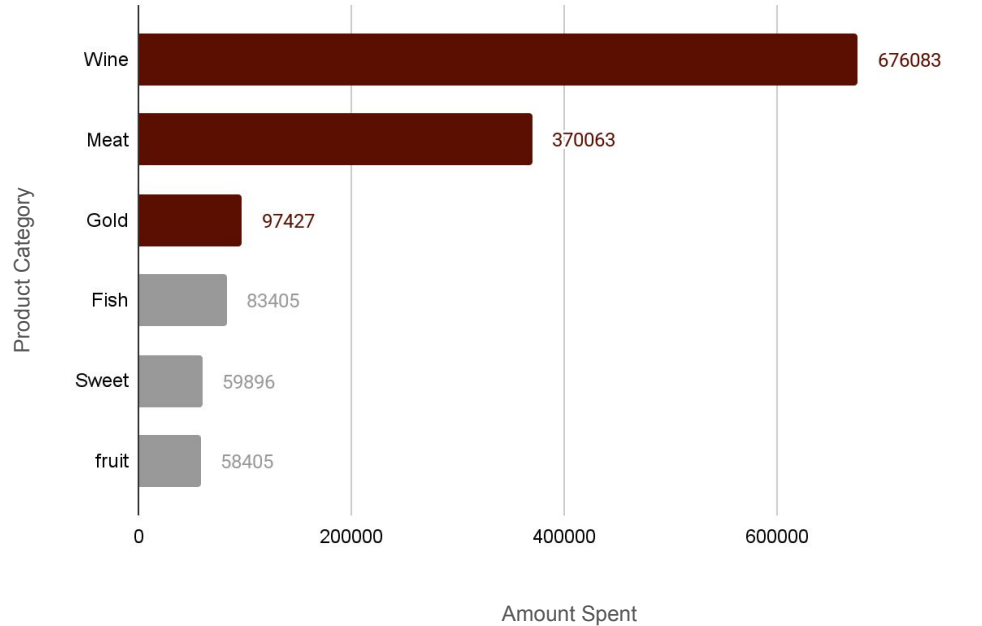
**50,4%** hold a bachelor's degree.

**45,3%** of customers come from the mid-income category.



# Customer's Preference

Most Spending Item

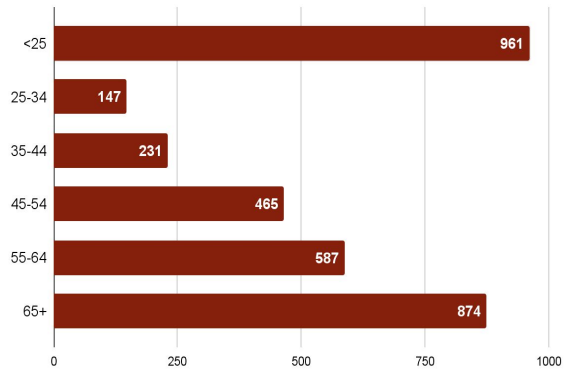


Overall, the **top three** categories where Sunrise **customers spend the most** are **Wine, Meat, and Gold** products. These categories are typically higher in price than other items, making them the main drivers of total spending.

# Customer Spending Behavior

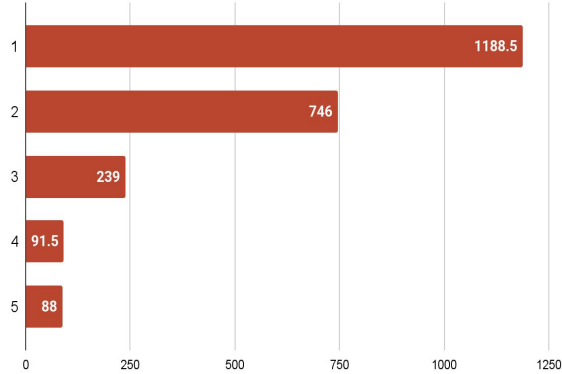
## Breakdown by demographic

by Age Group



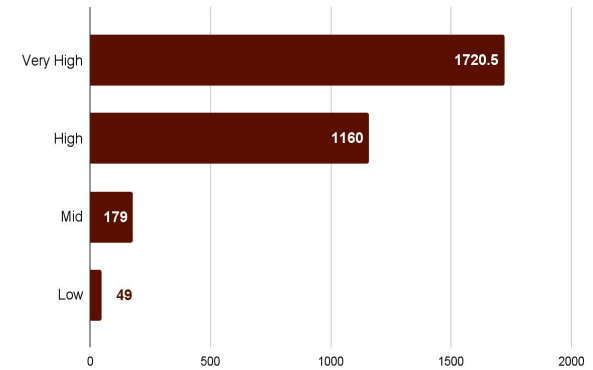
Median **spending peaks** among customers **under 25**.

by Family Size



**1-person households** record the **highest median spending** among all household sizes.

by Income Category

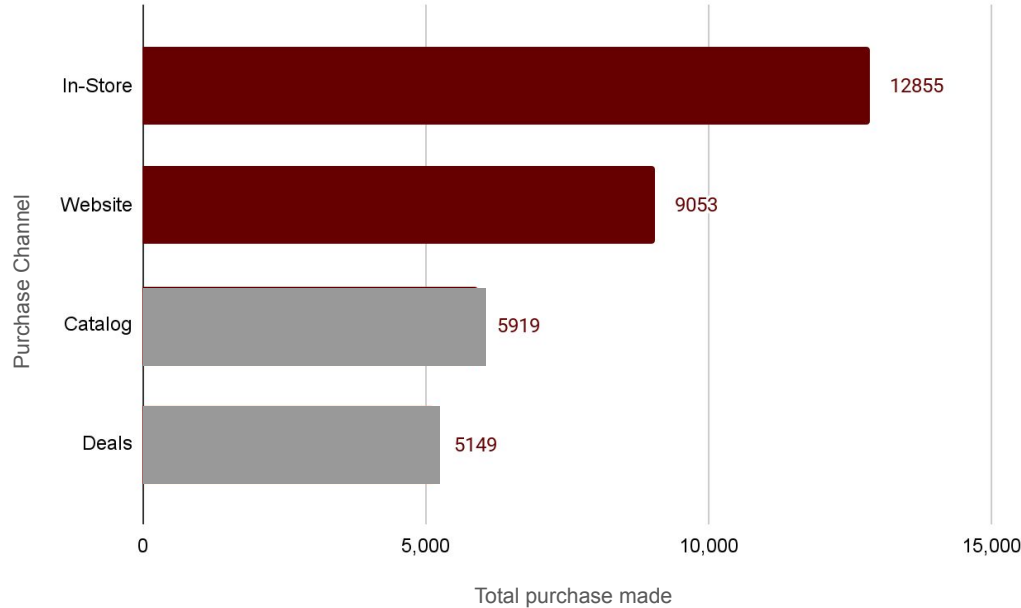


**Higher income** levels are clearly reflected in **higher spending**.



# Customer's Purchase behavior

Favourite Purchase Channel

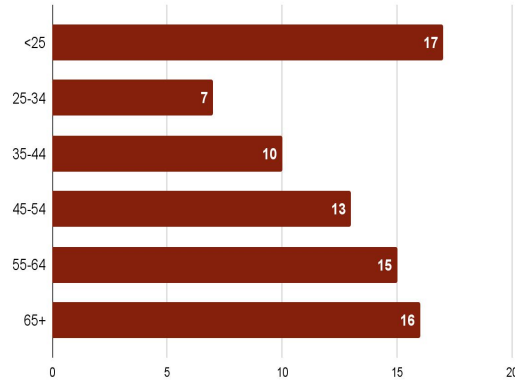


**Most customers prefer shopping in-store,**  
with **online purchases** coming in second.  
Catalog and deals channels contribute at  
nearly the same level.

# Customer's Purchase behavior

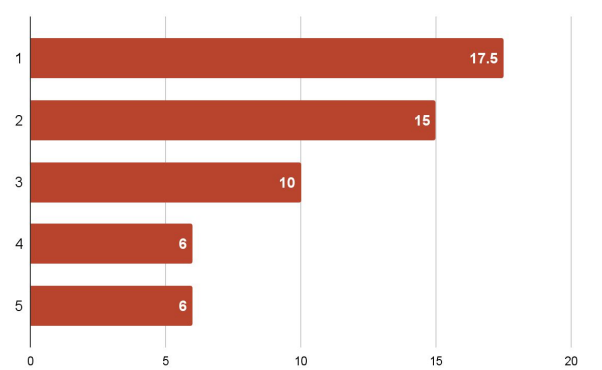
## Breakdown by demographic

by Age Group



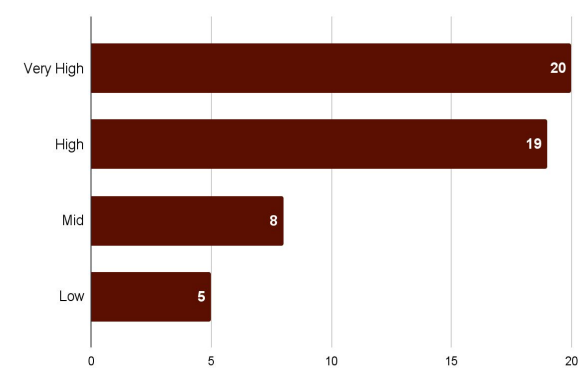
Median purchase frequency is highest in the under-25 segment, indicating strong engagement from **younger customers**.

by Family Size



**1-person** households also show the highest purchase frequency.

by Income Category

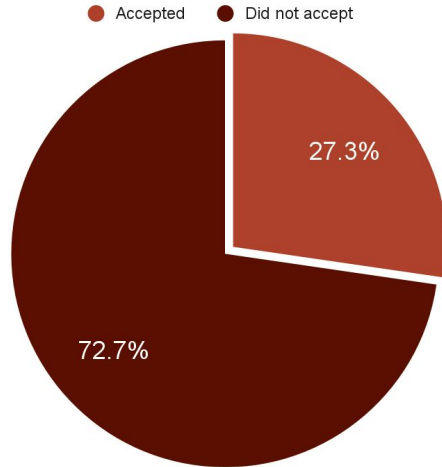


**Higher income** levels are clearly reflected in **higher purchase activity**

# Marketing Analysis

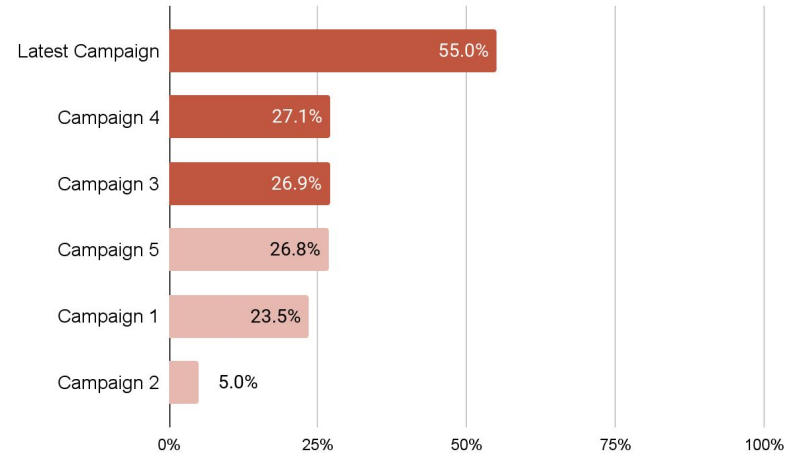
# Campaign Performance

How many customers accepted the campaign offers?



Almost **73%** of customers have never **accepted** any campaign offers, indicating **low overall campaign engagement**.

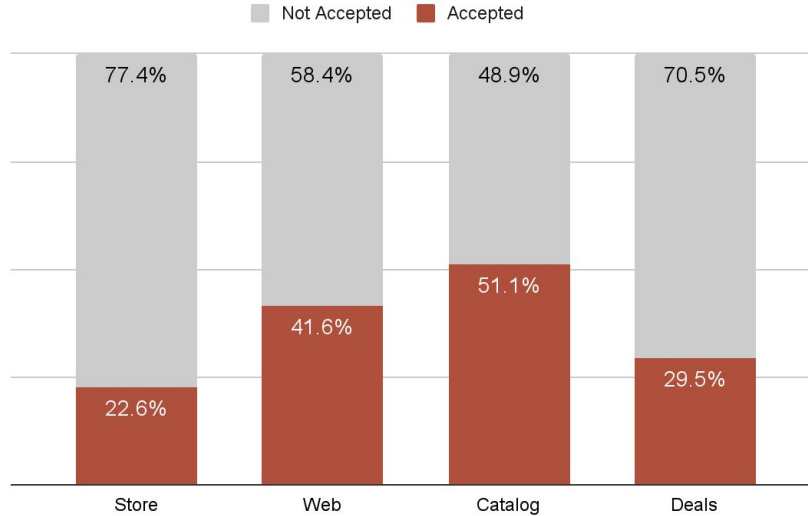
Top-performing campaign based on customer response.



The **Latest Campaign** received the highest response, making it a **strong benchmark** for future campaign strategies.

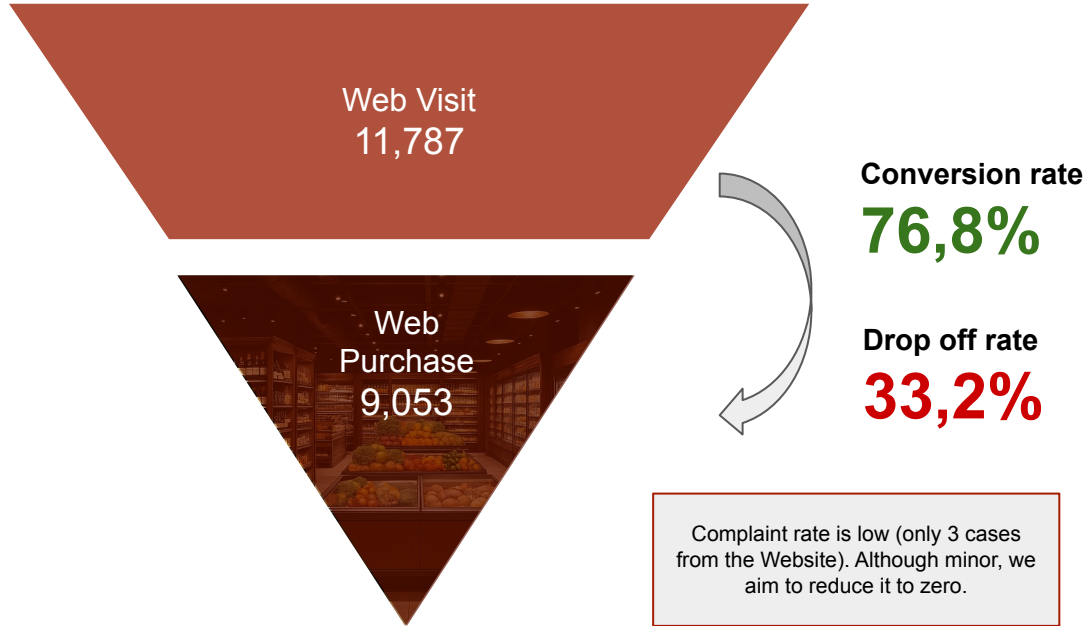
# Campaign Performance

Top platform used by customers who engage with promotions.



Previously, Store was the most used channel overall. Interestingly, **among customers that engaged with the campaign, Catalog became the top channel**, followed by Web.

# Website Conversion Funnel

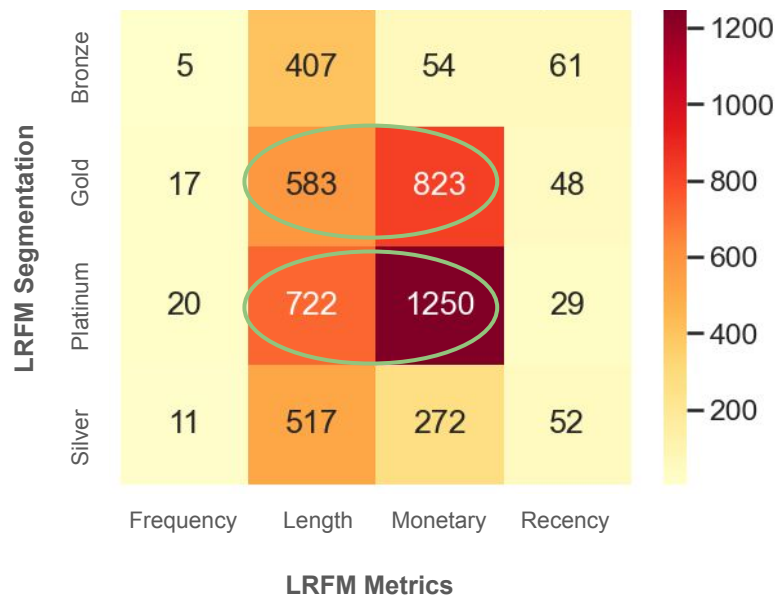


- A quite high conversion rate through website purchases at **76.8%**.
- However, it seems **33.2% of visitors drop off**, indicating that some users change their mind before completing the purchase.



# Length Recency Frequency Monetary Analysis

**Objective:** to segment customers based on their engagement and value, enabling more targeted marketing, personalized experiences, and smarter retention strategies.



**Platinum** — Top segment with the highest spending, longest tenure, and most recent activity, **core revenue driver**.

**Gold** — Strong engagement and spending, showing **high loyalty** and retention value.

**Silver** — Moderate spending and tenure but lower frequency, **good target for reactivation**.

**Bronze** — Lowest spending and engagement, with the highest recency, indicating **churn risk**.

# Strategic Recommendation

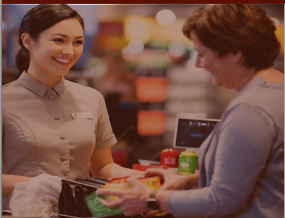
Marketing Teams		
	High Engagement / Frequency	Low Engagement / Frequency
High Value / Spending	<p><b>Platinum</b> : Top spending, longest tenure, recent activity (core revenue driver)</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>- <b>Exclusive promotions</b> (e.g., “early access” for Valentine bundle)</li> <li>- <b>Premium in-store experiences</b> (e.g., wine tasting bar or BBQ Night demo)</li> <li>- <b>Personalized loyalty offers via email &amp; web</b></li> </ul>	<p><b>Gold</b> : High spending, strong loyalty</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>- <b>Cross-selling bundles</b> (e.g., Wine + Meat, Sweets + Fruits)</li> <li>- <b>Seasonal campaigns</b> (e.g., “Christmas Hampers”, “Summer BBQ Deals”)</li> <li>- <b>Product curation &amp; catalog refresh</b> to sustain engagement</li> </ul>
Low Value / Spending	<p><b>Silver</b> : Moderate spending &amp; tenure, lower frequency</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>- <b>Reactivation campaigns</b> (e.g., discount voucher via email)</li> <li>- <b>Payday or Black Friday-style online sales</b></li> <li>- <b>Simplified checkout flow &amp; targeted reminders</b> (e.g., abandoned cart reminders)</li> </ul>	<p><b>Bronze</b> : Lowest spending, high recency (churn risk)</p> <p><b>Action:</b></p> <ul style="list-style-type: none"> <li>- <b>Awareness promotions</b> (e.g., first-purchase discounts)</li> <li>- <b>Starter bundle deals</b> (e.g., “Mix &amp; Match Fruits &amp; Snacks”) –</li> <li>- <b>Personalized “We miss you”</b> or reactivation push messages with light offers</li> </ul>

## Store Managers



- **Maintain Excellent In-Store Experience:** Keep the store layout clean, organized, and easy to navigate while ensuring high-value products (wine, meat, sweets, fruits) remain visible and well-displayed.
- **Empower & Engage Staff:** Ensure staff remain attentive, responsive, and knowledgeable to provide a smooth shopping experience and support cross-selling opportunities.
- **Strengthen Campaign Execution:** Align in-store activation with marketing efforts, ensuring promotions and thematic displays (e.g., BBQ Nights, Valentine's Specials) are executed consistently and effectively.

## Customer Service Teams



- **Maintain Low Complaint Levels:** Keep service fast, responsive, and solution-oriented to preserve the strong customer satisfaction rate.
- **Proactive Customer Engagement:** Support retention by providing clear information, following up on inquiries, and reinforcing positive experiences across all touchpoints.



**THANK YOU**

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