

Sales & Customer Success

A Deep Dive into US Sales & Customer Behavior: 2020-2023



Plan

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Dashboards and analysis



Data Pre-processing

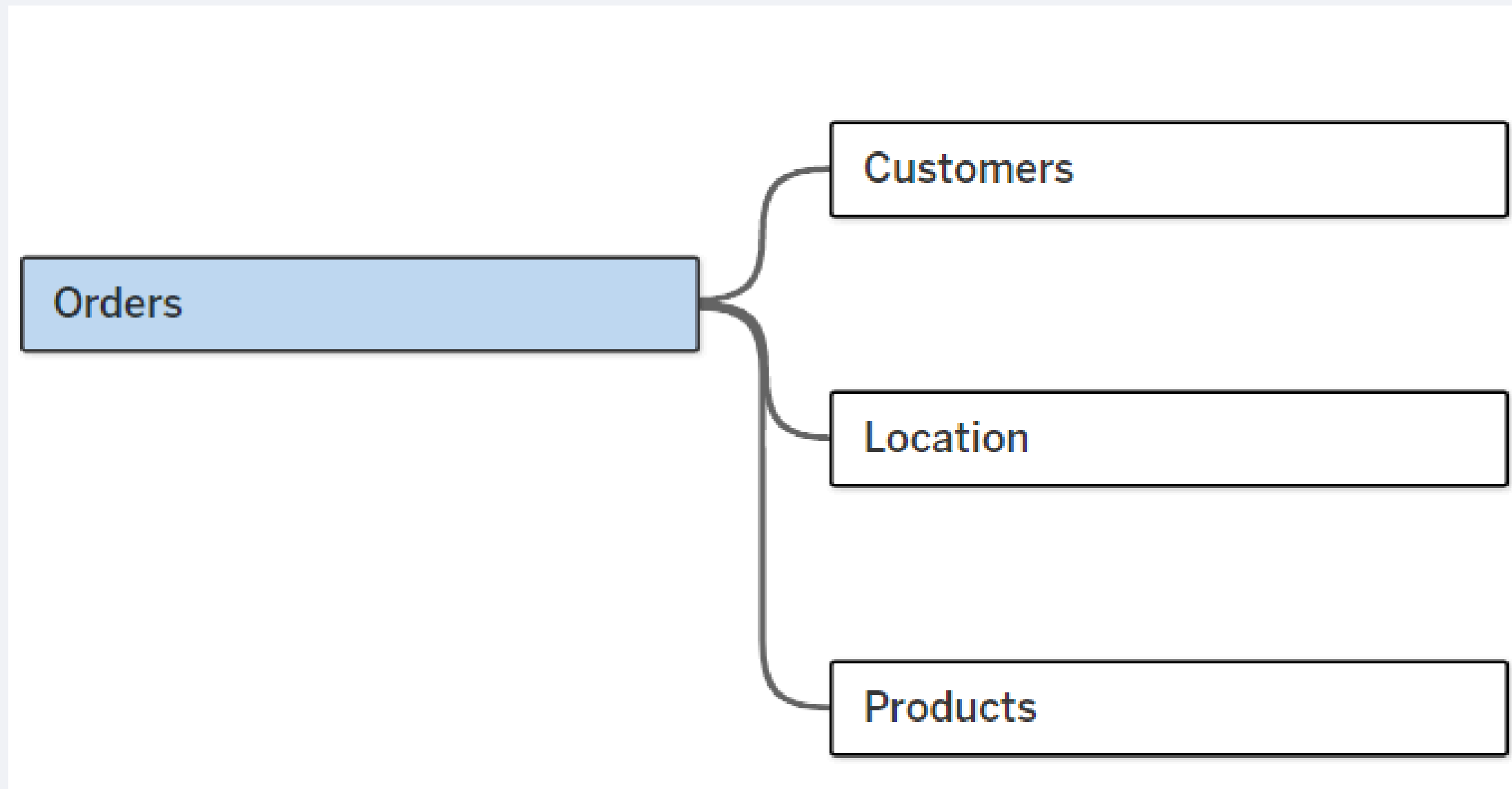


In this phase, minimal data processing was performed. The only significant transformation involved converting text-based sales, profit, and quantity values in the "orders" table to numerical values by replacing commas with periods. Additionally, exploratory data visualization was conducted to gain a better understanding of the dataset.

# Orders.csv Sales	# Orders.csv Quantity	# Orders.csv Discount	# Orders.csv Profit
261.96	2	0.000000	41.91
731.94	3	0.000000	219.58

Database table relationships






The dataset consists of three dimension tables (customers, location, products) and one fact table (orders).



Customer Table

<div>Abc</div> <div>Customers.csv</div> <div>Customer ID (Customer...</div>	<div>Abc</div> <div>Customers.csv</div> <div>Customer Name</div>
AA-10315	Alex Avila
AA-10375	Allen Arnold
AA-10480	Andrew Allen
AA-10645	Anna Andreadi
AB-10015	Aaron Bergman
AB-10060	Adam Bellavance
AB-10105	Adrian Barton

Locations Table

<div>Location.csv</div> <div>Postal Code (Location.c...</div>	<div>Location.csv</div> <div>City</div>	<div>Location.csv</div> <div>State</div>	<div>Location.csv</div> <div>Region</div>	<div>Location.csv</div> <div>Country/Region</div>
76106	Fort Worth	Texas	Central	United States
53711	Madison	Wisconsin	Central	United States
68025	Fremont	Nebraska	Central	United States
77095	Houston	Texas	Central	United States
75080	Richardson	Texas	Central	United States
77041	Houston	Texas	Central	United States
60540	Naperville	Illinois	Central	United States

Products Table

Abc Products.csv	Abc Products.csv	Abc Products.csv	Abc Products.csv
Product ID (Products.csv)	Category	Sub-Category	Product Name
FUR-BO-10000112	Furniture	Bookcases	Bush Birmingham C
FUR-BO-10000330	Furniture	Bookcases	Sauder Camden Co
FUR-BO-10000362	Furniture	Bookcases	Sauder Inglewood L
FUR-BO-10000468	Furniture	Bookcases	O'Sullivan 2-Shelf H
FUR-BO-10000711	Furniture	Bookcases	Hon Metal Bookcas
FUR-BO-10000780	Furniture	Bookcases	O'Sullivan Plantatio
FUR-BO-10001337	Furniture	Bookcases	O'Sullivan Living Dir

Orders Table (numerical values)

# Orders.csv	# Orders.csv	# Orders.csv	# Orders.csv
Sales	Quantity	Discount	Profit
261.96	2	0.000000	41.91
731.94	3	0.000000	219.58
14.62	2	0.000000	6.87
957.58	5	0.450000	-383.03
22.37	2	0.200000	2.52
48.86	7	0.000000	14.17
7.28	4	0.000000	1.97

Dashboards



Sales Dashboard

Dashboard Purpose:

The purpose of sales dashboard is to present an overview of the sales metrics and trends in order to analyze year-over-year sales performance and understand sales trends.

Customer Dashboard

Dashboard Purpose:

The customer dashboard aims to provide an overview of customer data, trends and behaviors. It will help marketing teams and management to understand customer segments and improve customer satisfaction.



Sales Dashboard

Key Requirements

KPI Overview

Display a summary of total sales, profits and quantity for the current year and the previous year.

Sales Trends

- Present the data for each KPI on a monthly basis for both the current year and the previous year.
- Identify months with highest and lowest sales and make them easy to recognize.

Product Subcategory Comparison

- Compare sales performance by different product subcategories for the current year and the previous year.
- Include a comparison of sales with profit.

Weekly Trends for Sales & Profit

- Present weekly sales and profit data for the current year.
- Display the average weekly values.
- Highlight weeks that are above and below the average to draw attention to sales & profit performance.





Sales Dashboard | 2022



2022 vs. 2021 ● Highest Month ● Lowest Month

Total Sales

\$609K

▲ 29.5% vs. PY



Total Profit

\$82K

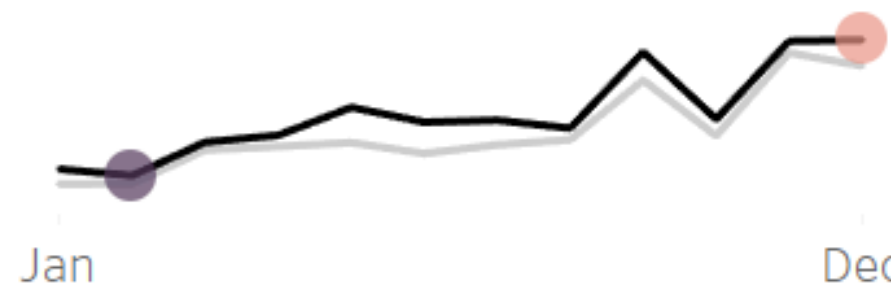
▲ 24.7% vs. PY



Total Quantity

\$10K

▲ 23.3% vs. PY



Sales & Profit By Subcategory

2022 Sales vs. 2021 Sales

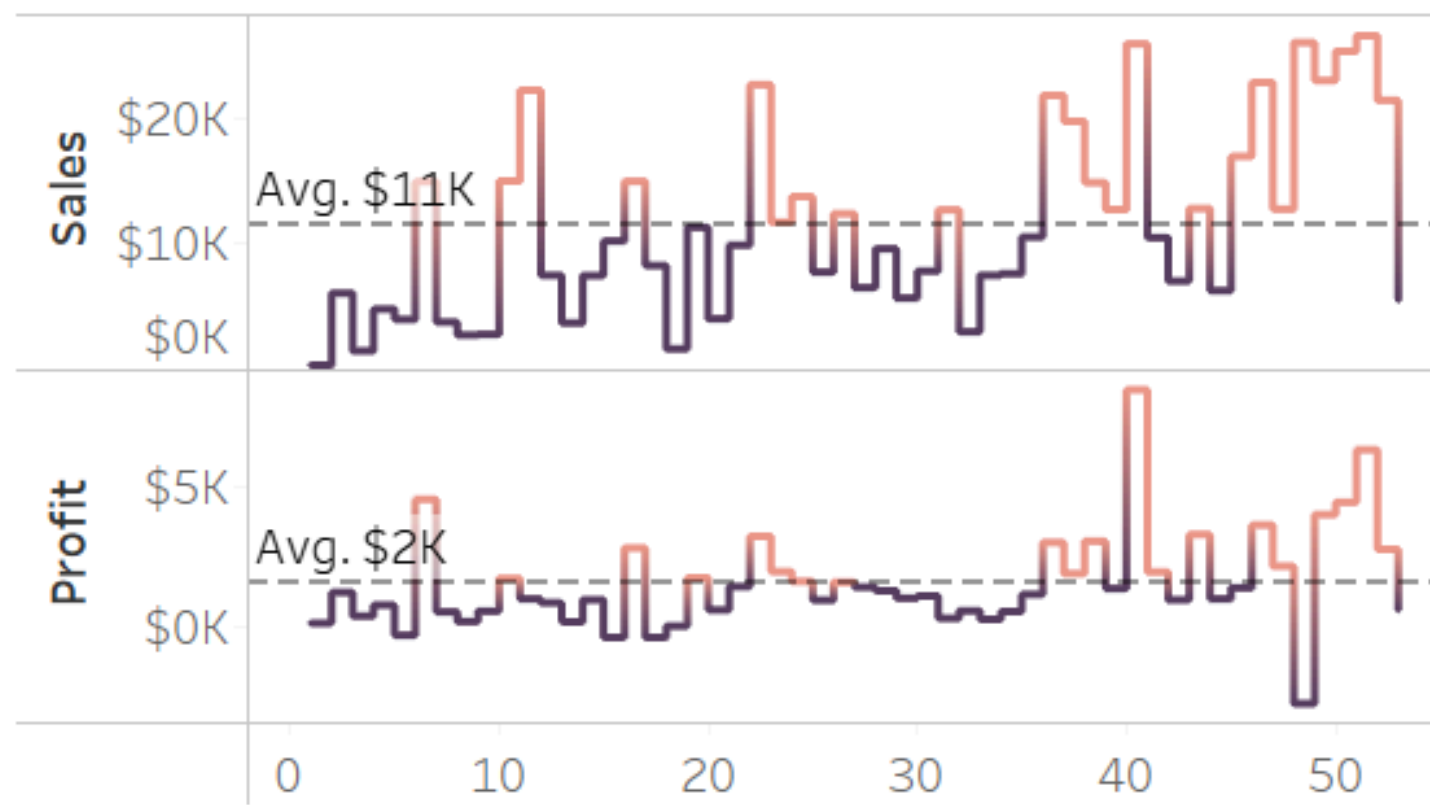
Chairs
Phones
Tables
Storage
Machines
Binders
Copiers
Accessories
Furnishings
Bookcases
Appliances
Paper
Supplies
Art
Envelopes
Labels
Fasteners

2022 ● Profit ● Lo..



Sales & Profit Trends over Time

2022 ● Above ● Below



Customer Dashboard

Key Requirements

KPI Overview

Display a summary of total number of customers , total sales per customer and total number of orders for the current year and the previous year.

Customer Trends

- Present the data for each KPI on a monthly basis for both the current year and the previous year.
- Identify months with highest and lowest sales and make them easy to recognize.

Customer Distribution by Number of Orders

Represent the distribution of customers based on the number of orders they have placed to provide insights into customer behavior, loyalty and engagement.

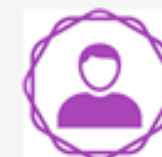
Top 10 Customers By Profit

- Present the top 10 customers who have generated the highest profits for the company.
- Show additional information like rank, number of orders, current sales, current profit and the last order date.





Customer Dashboard | 2022



2022 vs. 2021 ● Highest Month ● Lowest Month

Total Customers

638

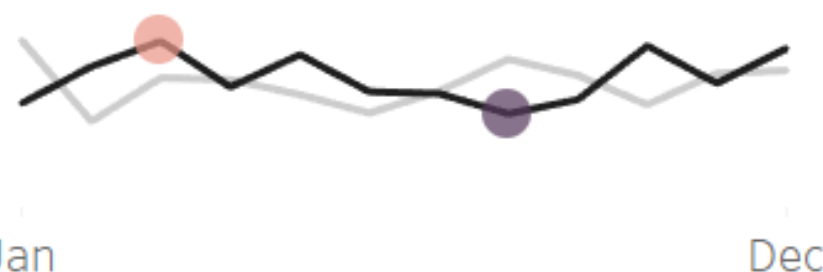
▲ 11.3% vs. PY



Total Sales Per Customers

\$955

▲ 16.3% vs. PY



Total Orders

1,315

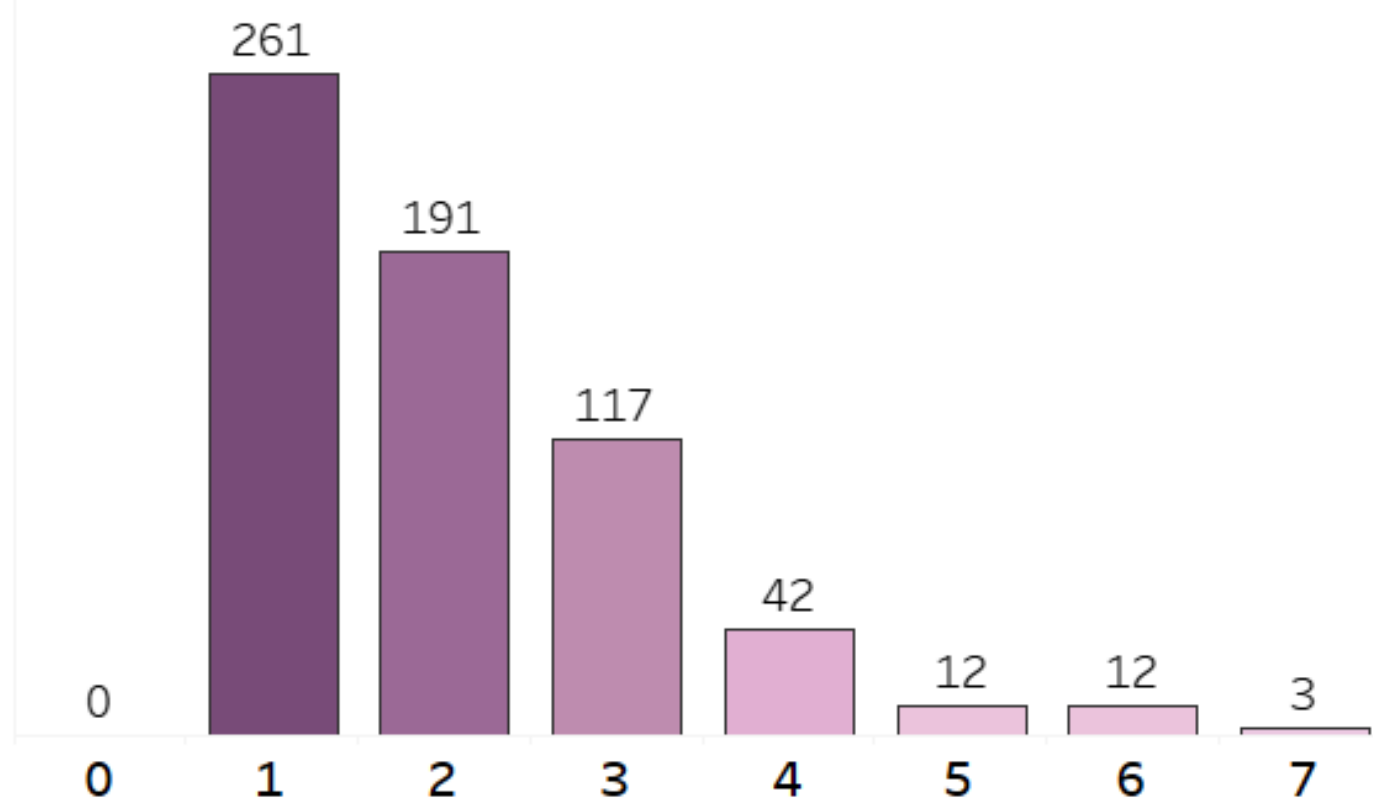
▲ 26.7% vs. PY



Top 10 Customers by Profit

Ra..	Customers	Last Order	2022 Pr..	2022 Sa..	Ord..
#1	Tamara Chand	26/11/2022	\$8,765	\$18,344	2
#2	Adrian Barton	19/11/2023	\$4,748	\$10,404	3
#3	Sanjit Engle	21/12/2023	\$2,674	\$9,879	3
#4	Bill Shonely	20/06/2022	\$2,405	\$9,200	2
#5	Daniel Raglin	10/11/2023	\$2,338	\$5,792	2
#6	Karen Daniels	02/09/2022	\$2,319	\$6,317	3
#7	Christopher C..	17/11/2023	\$2,083	\$11,901	3
#8	Dennis Pardue	06/01/2023	\$1,695	\$4,702	2
#9	Mark Cousins	26/11/2022	\$1,610	\$3,582	3
#10	Adam Bellava..	06/11/2023	\$1,568	\$4,801	3

Customer Distribution by Nr. of Orders



Design & Interactivity Requirements

Dashboard Dynamic

- The Dashboard should allow users to check historical data by offering them the flexibility to select any desired year.
- Provide users with the ability to navigate between the dashboards easily.
- Make the charts and graphs interactive, enabling users to filter data using the charts.

Data Filters

Allow users to filter data by product information like category and subcategory and by location information like region, state and city.

Demo

Thanks!