GLOBAL ELECTRONICS RETAILER

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INTRODUCTION

Maven Electronics is a global retailer offering a wide range of products, including computers, cell phones, TVs, cameras, appliances, and more, through both online and in-store channels

BUSINESS PROBLEM

Since 2020, revenue has been on a declining trend, prompting management to seek assistance in consolidating data for an exploratory analysis to identify underlying issues and opportunities for improvement.

OBJECTIVE

Create a data model and interactive report to help management explore performance.

DATASET OVERVIEW

Tables in the Dataset:

- **Sales**: Transaction details

- **Products**: Product-specific attributes

- **Stores**: Geographic and operational store data

- **Customers**: Demographics and customer profiles

- **Exchange_Rates**: Currency conversion rates for global sales

Dataset Size:

- **Records:** 62,884 rows

- **Fields:** 37 columns (combined)

Timeframe: 2016-2021

DATA PROCESSING

| Data Preparation	Data Modeling	Measure Creation	Interactive Reporting
Used **Power Query** in Excel to clean, format, and consolidate raw data	Built a relational data model by joining multiple tables using **Power Pivot**	Created key metrics (e.g., Total Orders, Total Revenue, AOV) using **DAX**	Developed a dynamic dashboard to visualize sales trends and insights

SOME IMPORTANT OBJECTIVES

REVENUE BY STORE TYPE

Online, 20.45%

In-Store, 79.55%
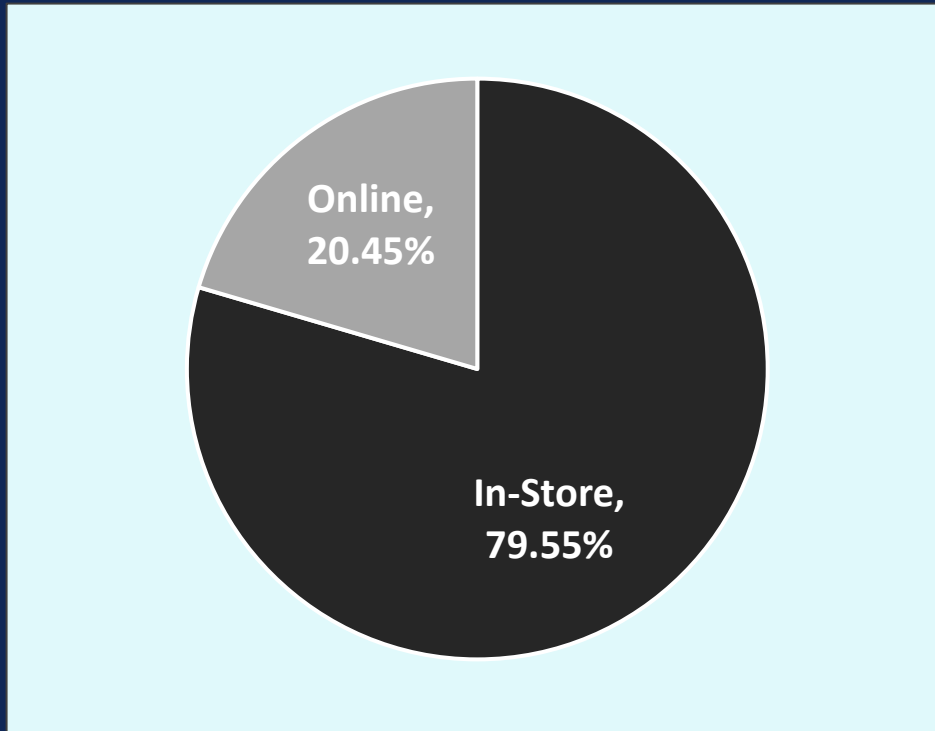
- Offline stores outperformed online stores in revenue generation

AVERAGE DELIVERY TIME

7.3

5.2

4.3

4.1

4.0

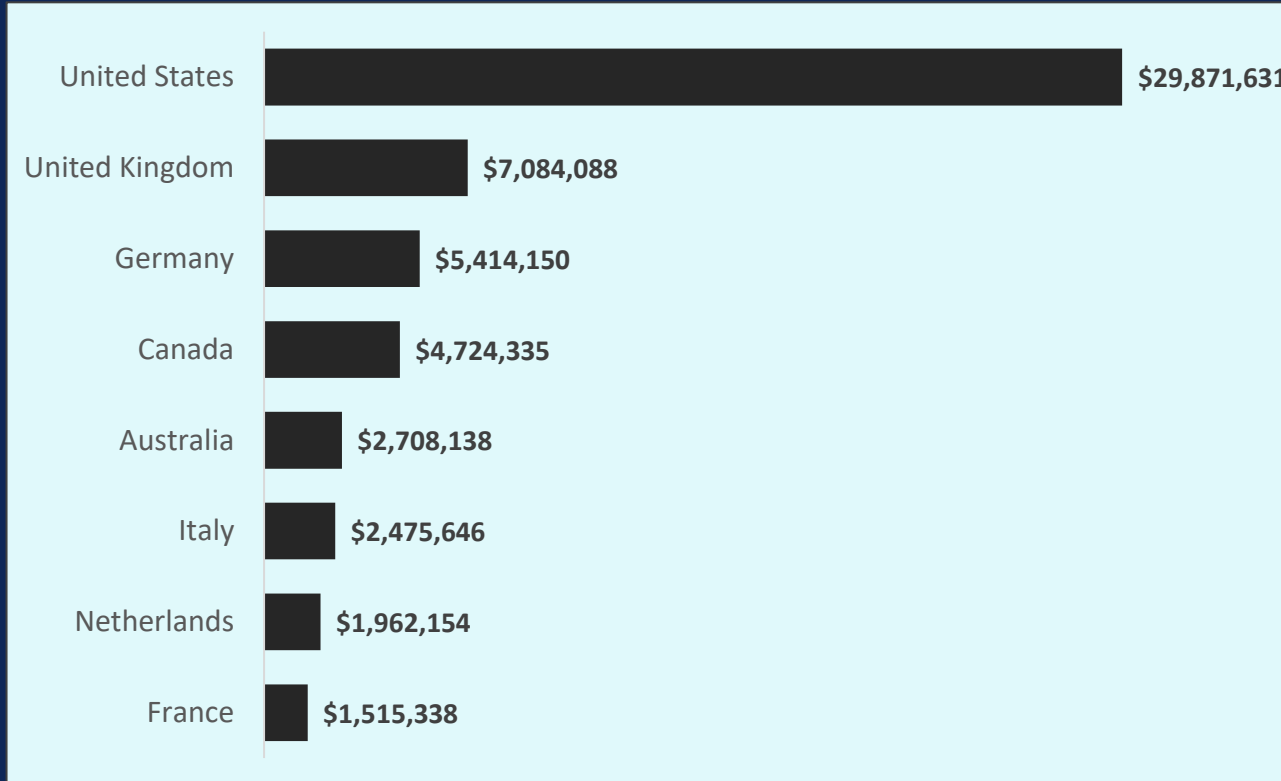3.8

2016   2017   2018   2019   2020   2021
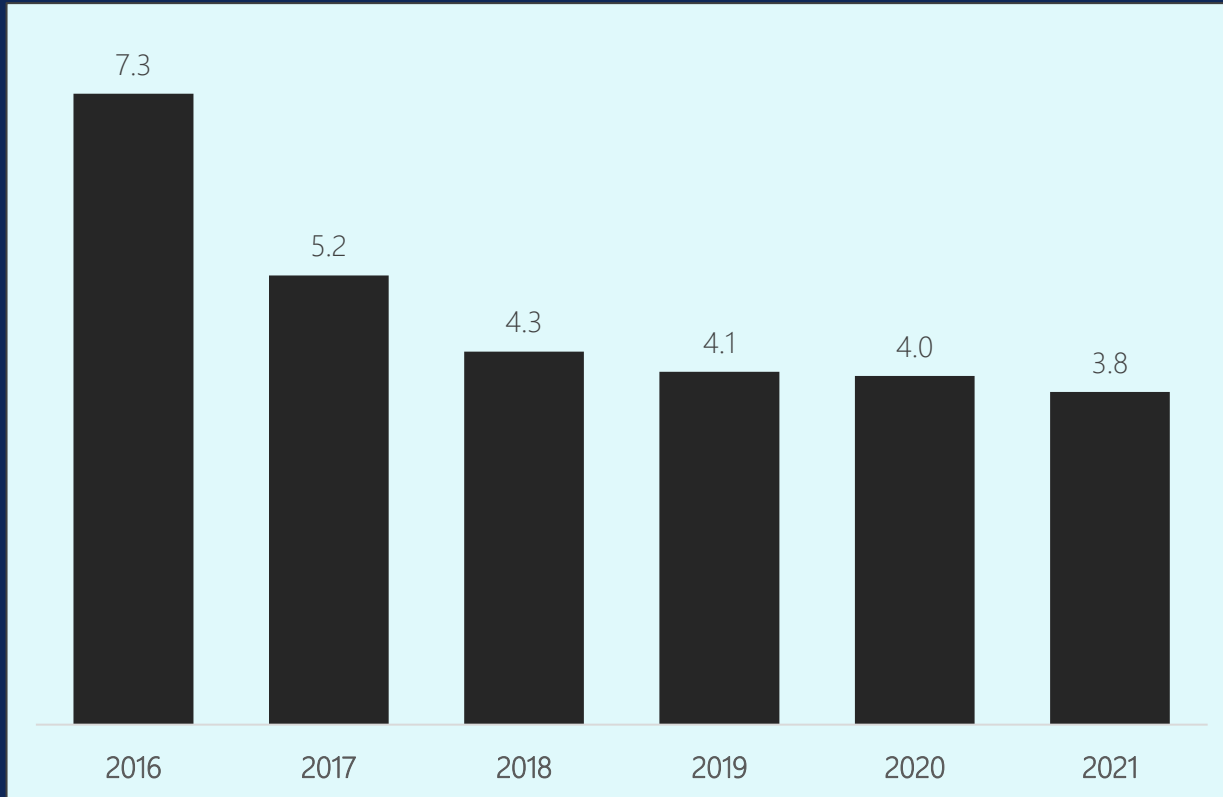
- The average delivery time has steadily improved over the years

PROFIT BY MONTH
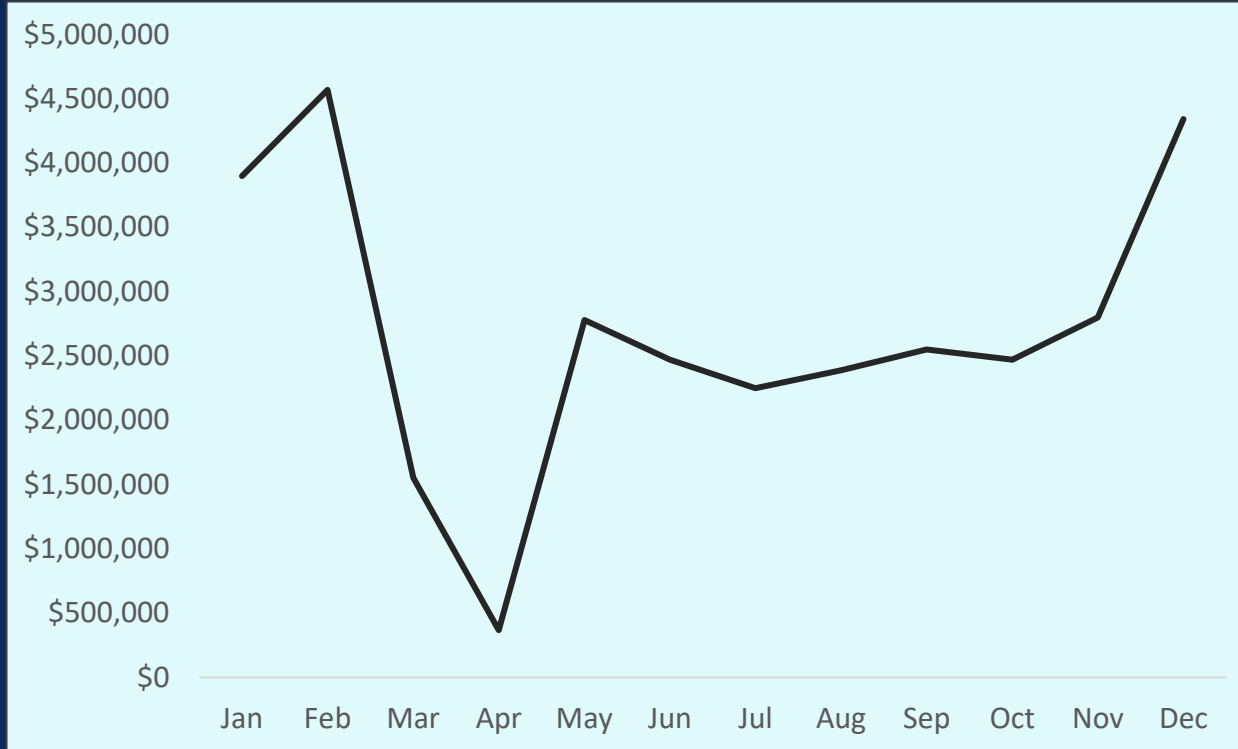
- Highest profitability observed during January, February, and December
- Lowest profitability recorded in March and April
- Steady profit levels maintained from May to November

REVENUE BY COUNTRY

Country	Revenue
United States	$29,871,631
United Kingdom	$7,084,088
Germany	$5,414,150
Canada	$4,724,335
Australia	$2,708,138
Italy	$2,475,646
Netherlands	$1,962,154
France	$1,515,338

- The USA accounts for the highest % of revenue and has a strong presence of offline stores
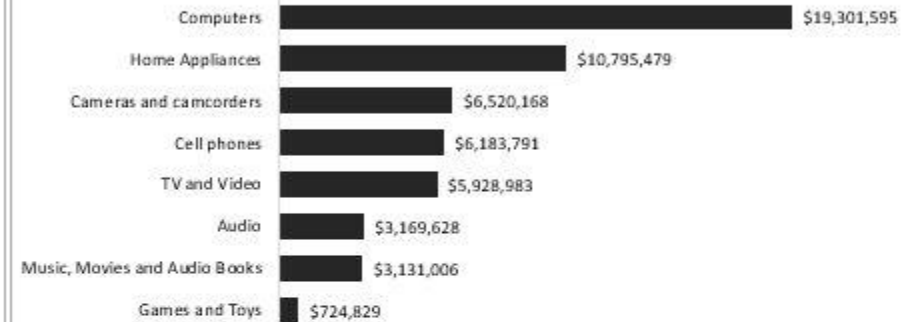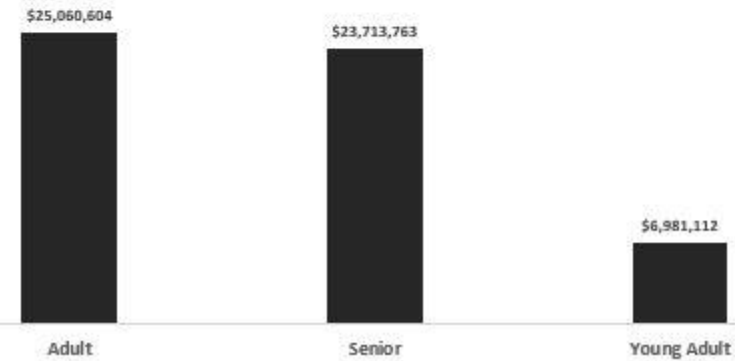
INSIGHTS

- ❑ Computers generated the highest revenue ($19.3M), followed by Home Appliances, while Games and Toys contributed the least
- ❑ The United States accounted for approximately 53% of total revenue
- ❑ The majority of revenue came from customers aged 30 and above
- ❑ Orders were fairly balanced between genders, with 50.73% from males and 49.27% from females
- ❑ Offline (in-store) sales drove 80% of the revenue, while online sales contributed 20%, indicating stronger performance from physical stores
- ❑ The average delivery time is 4.5 days, with significant improvement over time—dropping from over 7 days in 2016 to 3.8 days in 2021
- ❑ The volume of orders increased steadily from 2016 to 2019 but experienced a sharp decline in 2020. Data for 2021 represents only a partial year
- ❑ Revenue peaked between 2019 and 2020 but saw a noticeable decline afterward
- ❑ Maven Electronics was most profitable in **January**, **February**, and **December**, while **March** and **April** were the least profitable months

RECOMMENDATIONS

❑ **Expand Online Sales Channels:** Enhance the online shopping experience with better marketing, discounts, and faster delivery options to increase the 20% revenue share.

❑ **Improve Delivery Efficiency:** Maintain or further reduce delivery times to enhance customer satisfaction.

❑ **Monitor and Address Post-2020 Revenue Decline:** Investigate reasons for the sharp decline in 2020 and 2021. Analyze whether it was driven by external factors (e.g., global events) or internal issues like reduced marketing efforts or pricing changes, and take corrective actions.

❑ **Target High-Value Customers:** Develop marketing strategies for customers aged 30+ who contribute the most revenue.

❑ **Seasonal Promotions:** Focus on boosting profitability in low-performing months like March and April by offering seasonal discounts or promotions.

THANK YOU