

# Amazon Sales Analysis

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#### Introduction to Amazon and Project Goals

- Problem Statement and Approach
- <u>Data Overview</u>
- Key Insights:
  - Sales Trends
  - Order Priority Analysis
  - Product Performance
  - Geographical Analysis
  - Sales Channel Performance
  - Shipping Analysis
  - Profitability Insights
  - Customer Behavior
- Recommendations
- Conclusion

### Agenda



### Introduction

- Amazon: The undisputed champion of e-commerce, offering everything from books to electronics to cloud services.
- 2023 Sales: A whopping \$574.8 billion, up 12% from 2022!
- Our Mission: Dive deep into Amazon's sales data to uncover hidden treasures and help them sell even more.



#### Problem Statement

- Challenge: Amazon's sales data is massive and complex.
- **Goal:** Find ways to make Amazon even better by improving sales strategies, making customers happier, and increasing profits.
- Our Tools: We'll use Python for data visualization



### DataOxerview

- 14 Variables: We've got everything from dates and regions to sales figures and profit margins.
- 100 Observations: A solid sample size to work with.
- No Missing Data or Duplicates: Our data is clean and ready for action!



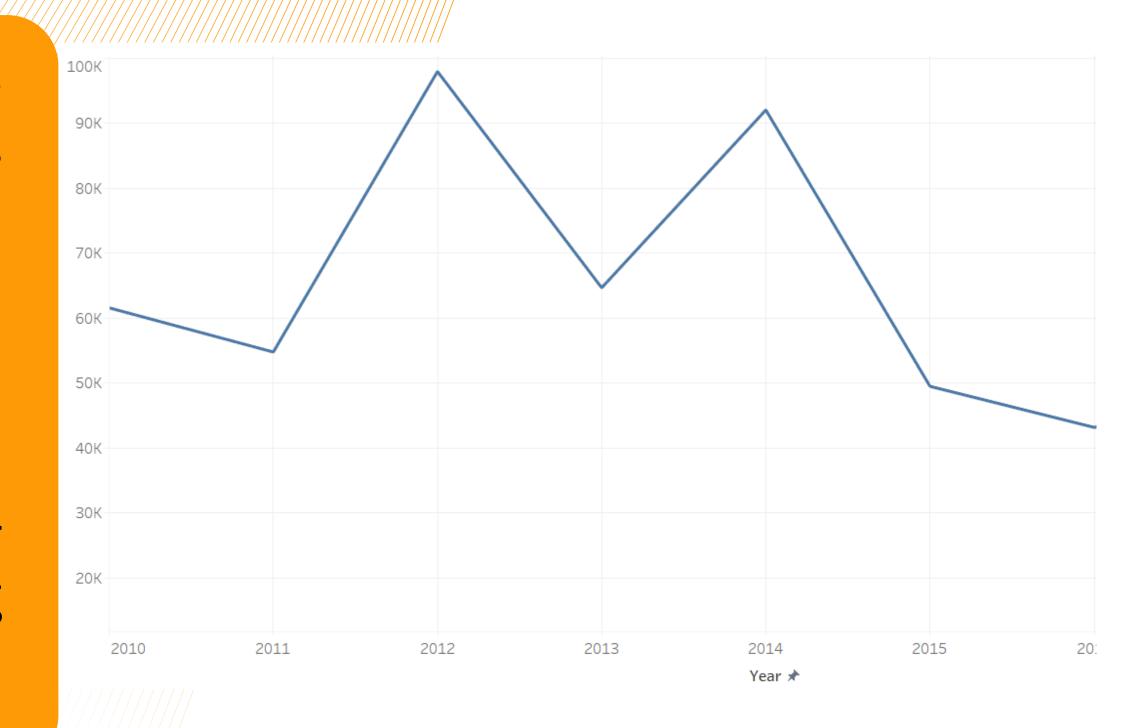
# Methodology

- 1. Data Cleaning: Making sure the data is tidy and ready for analysis.
- 2. Exploratory Data Analysis (EDA): Discovering patterns and insights hidden in the data.
- 3. Python Libraries: Pandas, Matplotlib, Seaborn our data analysis superheroes!



### Key Insights – Sales Trends

- Peak Seasons: Sales skyrocket in February and November – time to stock up!
- Summer Slump: Sales dip in March and August. Time to investigate and spice things up!
- Golden Years: 2012-2015 were Amazon's prime time for sales. What was happening then?



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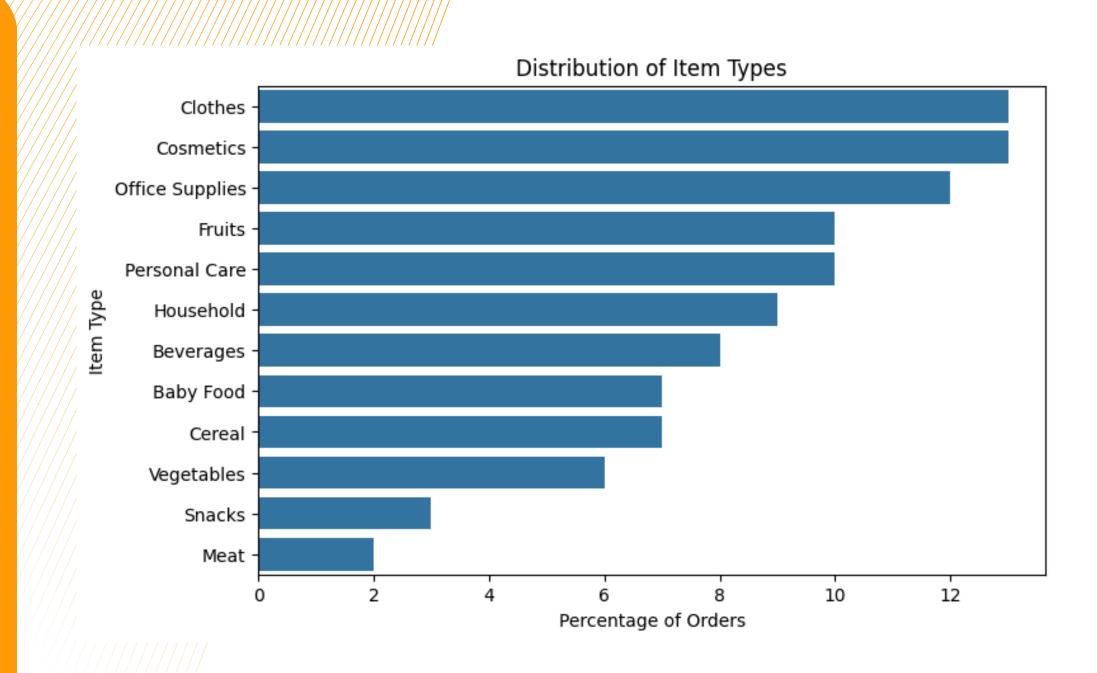
# Order Priority Analysis

- **High Priority = Big Bucks:** "High priority" orders bring in the most revenue. Makes sense, right?
- "Critical" Orders = Not So Critical for Sales: These orders might be important for customer service, but they don't make a big splash financially.
- Online Shoppers Take it Easy: More "Low priority" orders are placed online. Maybe those late-night browsing sessions lead to impulse buys?



#### Product Performance

- **Customers:** Clothes are Amazon's bestsellers, followed closely by cosmetics.
- Fashionably Profitable:
  Clothes were the profit kings
  between 2010 and 2017. Time
  for a fashion show!
- Meat = Low Margins: The meat category had the lowest profit margins. Maybe it's time to rethink that strategy.



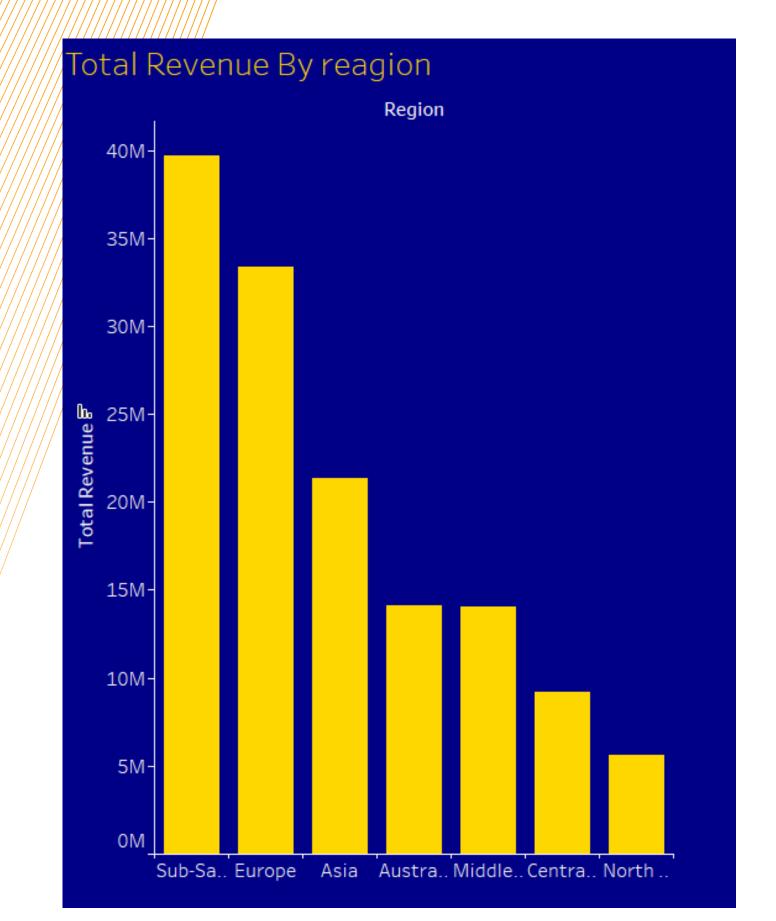


# Geographical Analysis

 Sub-Saharan Africa Rules!
 This region brings in almost 30% of Amazon's total revenue.

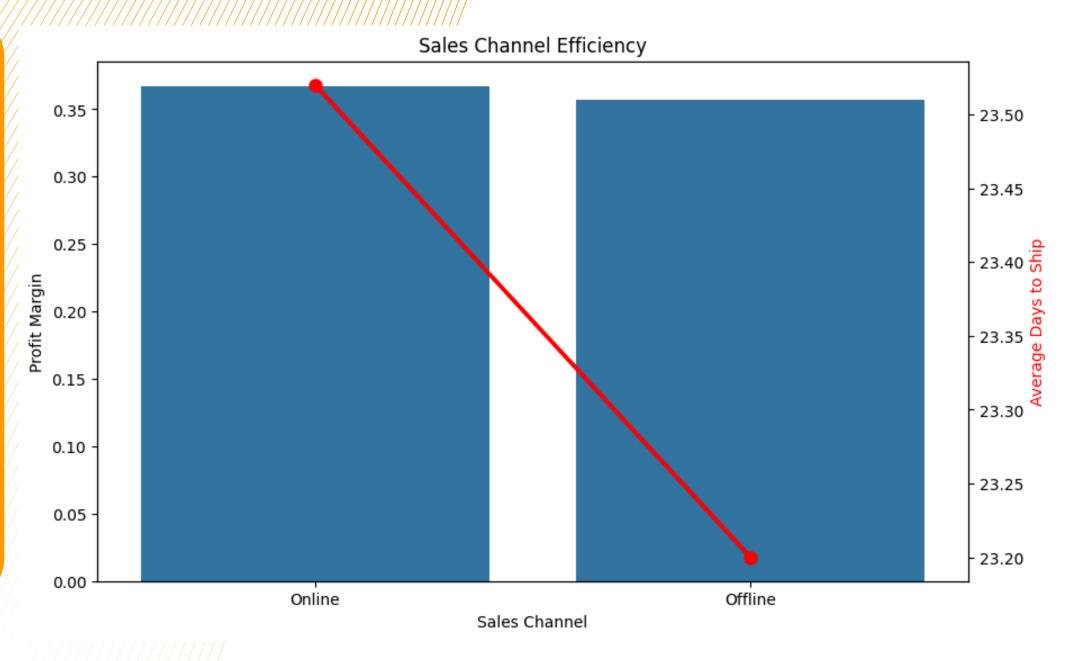


- Regional Favorites:
- Asia loves household items and office supplies.
- Australia and Oceania can't get enough cosmetics, snacks, and beverages.
- Europe is all about cosmetics and office supplies.
- North America stocks up on household items.



#### Sales Channel Performance

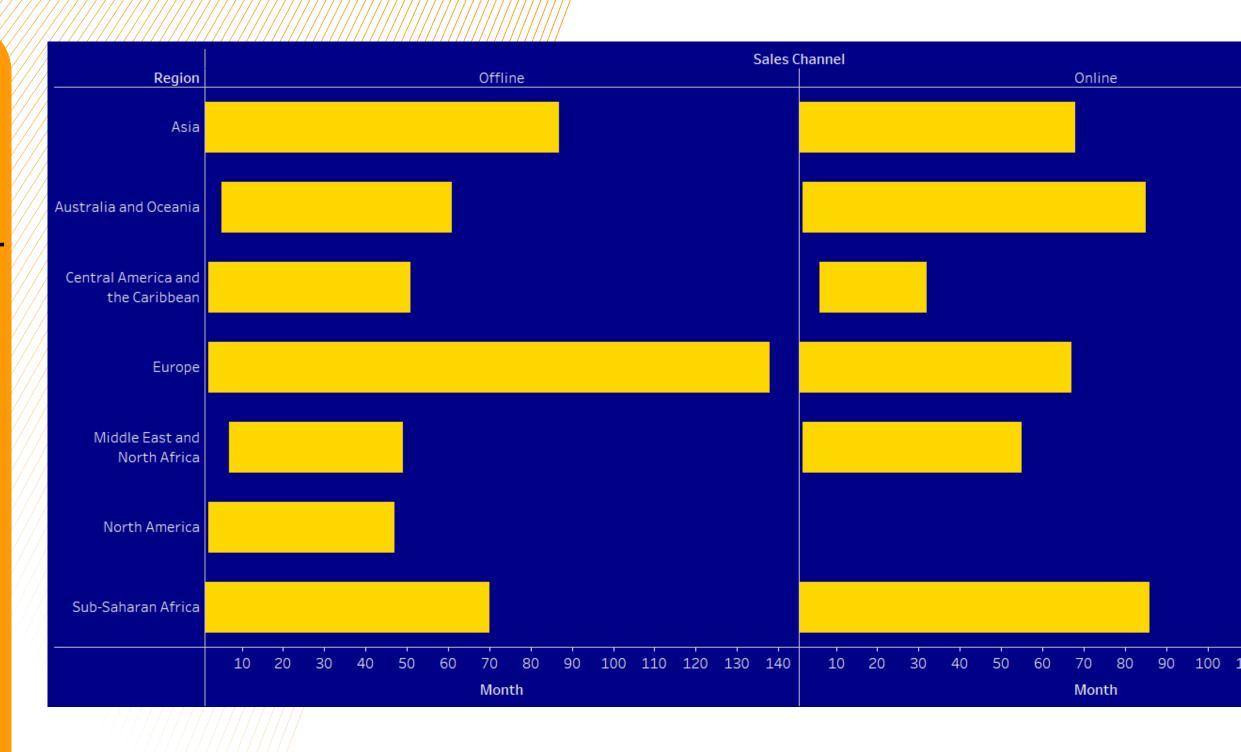
- Online is King (of Profit):
  Online sales have been steadily increasing their profit margins since 2010.
- Need it Now? Go In-Store:
   Online orders take a bit longer to arrive than offline orders.



# Shipping Analysis

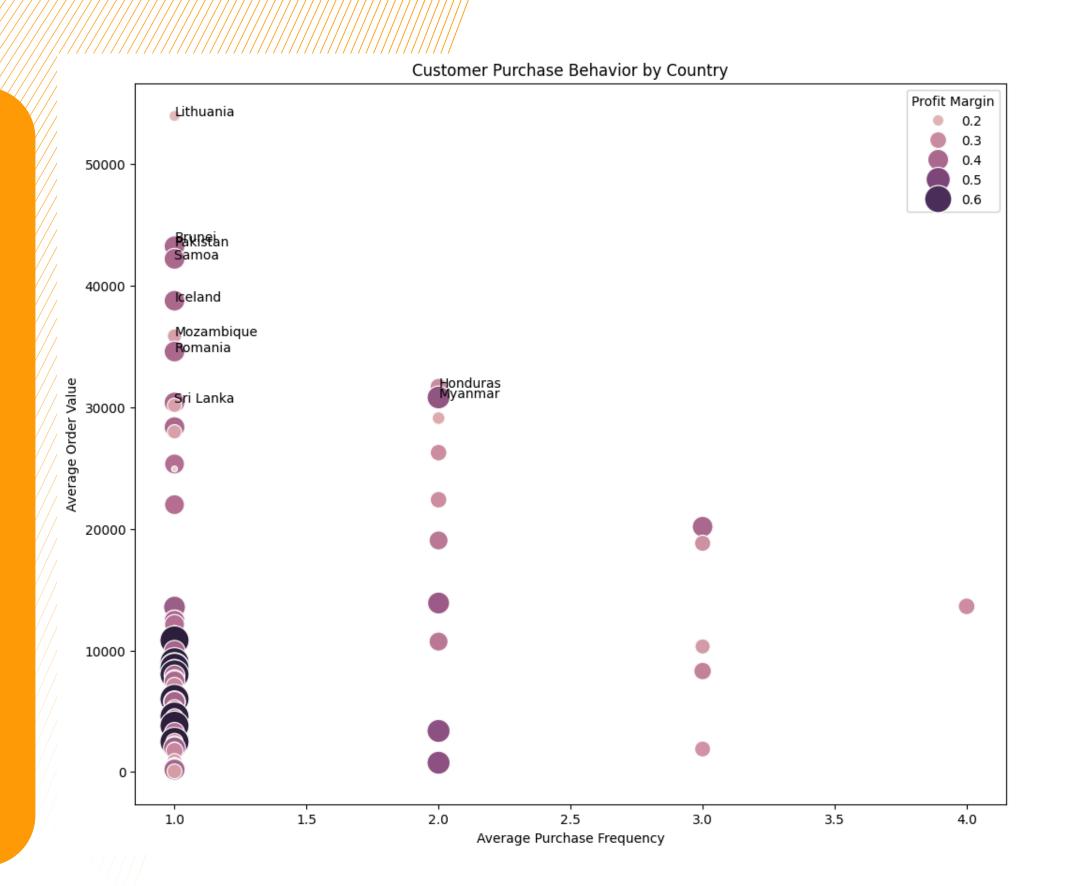
- Summer Shipping Blues:

   May, July, and August have the longest shipping times.
   Maybe it's all those summer vacations slowing things down?
- Speedy Sub-Saharan
  Africa: This region gets
  their orders faster than
  anyone else.
- Winter Wins: January,
   February, and March have the quickest shipping.



#### Customer Behavior

- **Big Spenders:** Customers in Honduras are spending the most.
- Bargain Hunters?: Customers in Kuwait are spending the least. Is there a pricing opportunity here?
- High Priority = Fast Service:
   High priority orders get
   processed and shipped faster.
   Makes sense keep those VIPs
   happy!



#### Recommendations

- Market Smart: Focus on peak sales periods (February and November) and figure out what's causing the summer slump.
- Speed Up Shipping: Especially for those online orders.
- Play to Your Strengths: Focus on regions and product categories that are already doing well.
- **Don't Forget the Underdogs:** Figure out how to improve sales in places like Kuwait.
- **Keep an Eye on the Market:** Things change fast, so stay on top of trends to stay ahead of the competition!



#### Conclusion

- Sales Management is Key: To win in the competitive world of e-commerce, you need to be smart about how you sell.
- One Size Doesn't Fit All: Online and offline sales need different strategies.
- Think Local, Think Product: Understanding regional preferences and product performance is key to growing revenue.
- Happy Customers = Repeat Customers: Make sure your logistics are running smoothly to keep people coming back for more.

