Eniac Case Study

How Discounts drive Revenue Growth

Evaluating the Impact of Discounts on Revenue Growth

Products

- Product_name
- Product_desc
- Price

Orders

- order_id
- created_date
- Status = Completed
- total_paid

Status (Completed) = 52321
Total orders = 40985
Total products = 9992

Orderlines

- id_order
- date
- product_quantity
- unit_price

Can discounts improve revenue and allow the company to grow?

Product Categories

Most discounted categories

- Total 41 categories
- Discounted (30 categories)

Most ordered products

- Total 20 categories

Discount

= Total paid - Unit price

Revenue Market

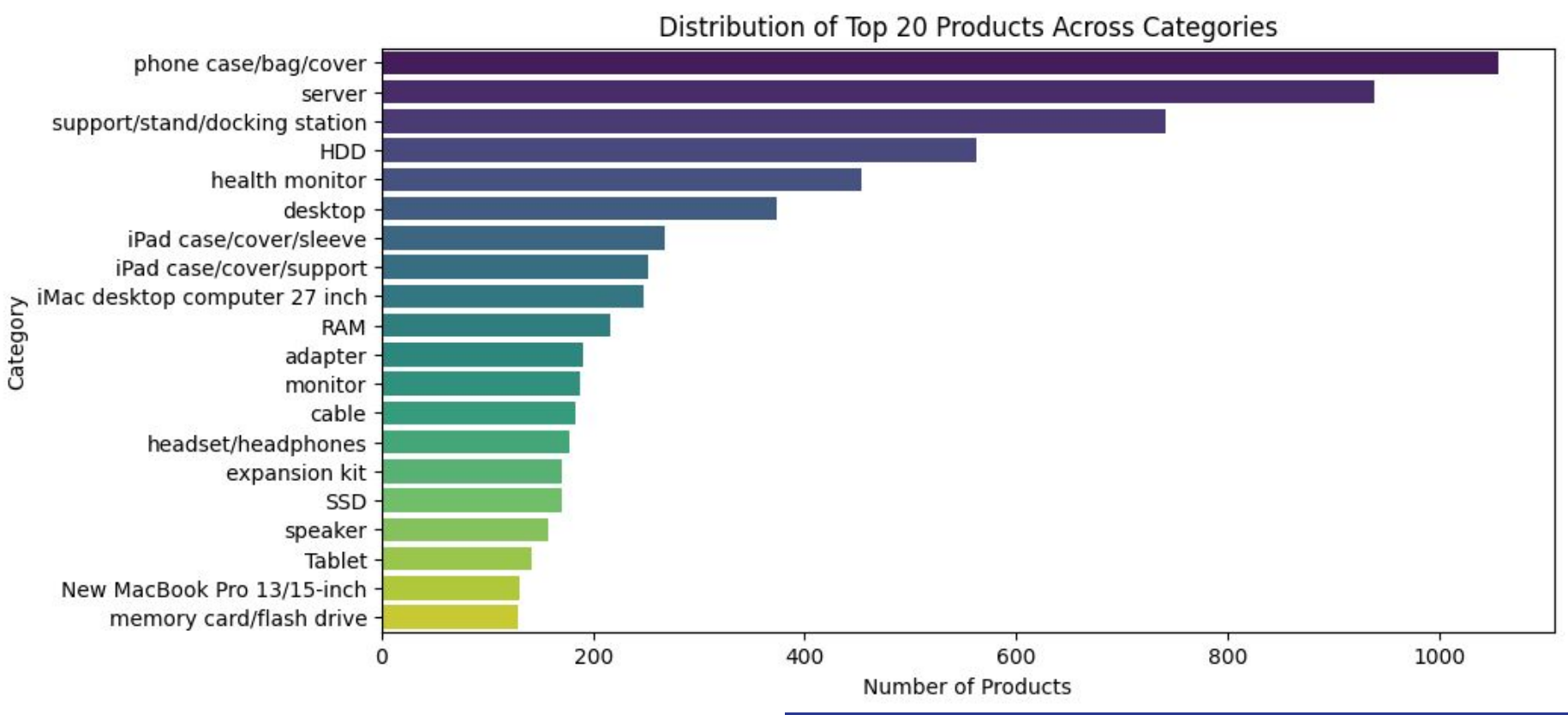
- Total sales
- Categories with most revenue
- Monthly evaluation
  - Average price
  - Orders placed
  - Revenue

Seasonality & trends

- Black Friday
- Christmas
- Special occasions?

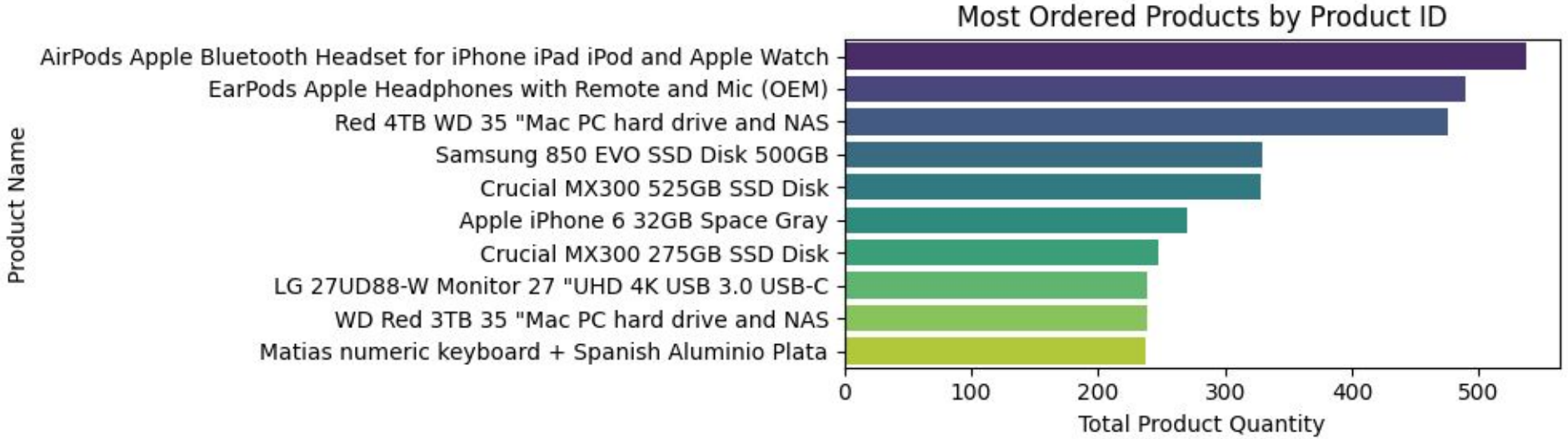
Product categories

Maximum products in a category



Product Performance

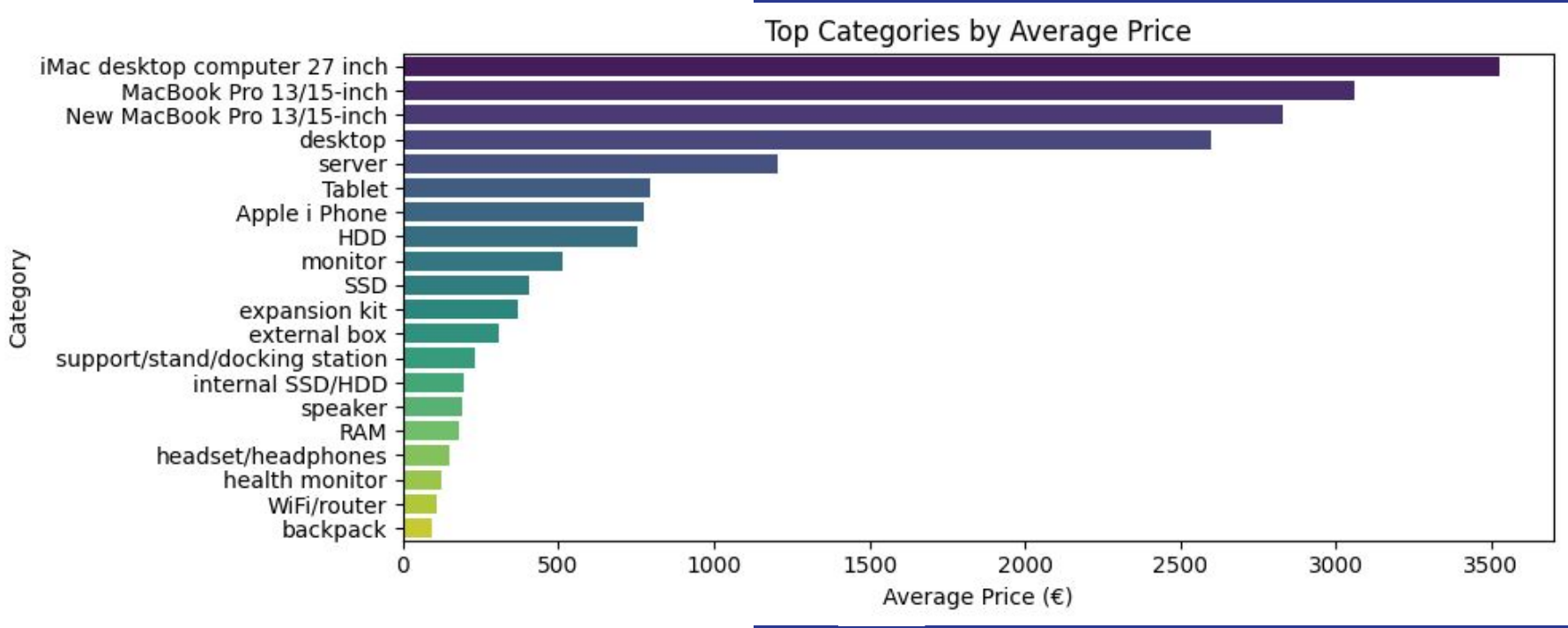
Apple products - High demand!



Most ordered products

Product Category and Pricing

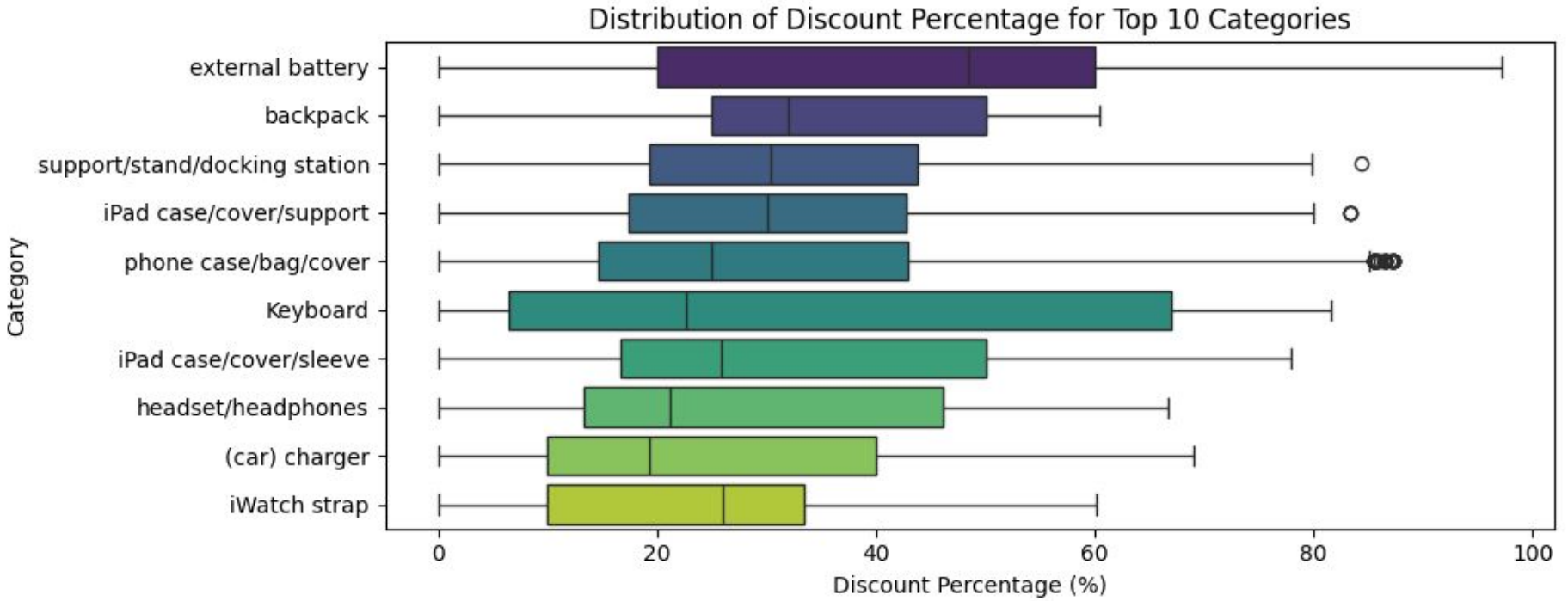
MacBooks, iMac and Desktops



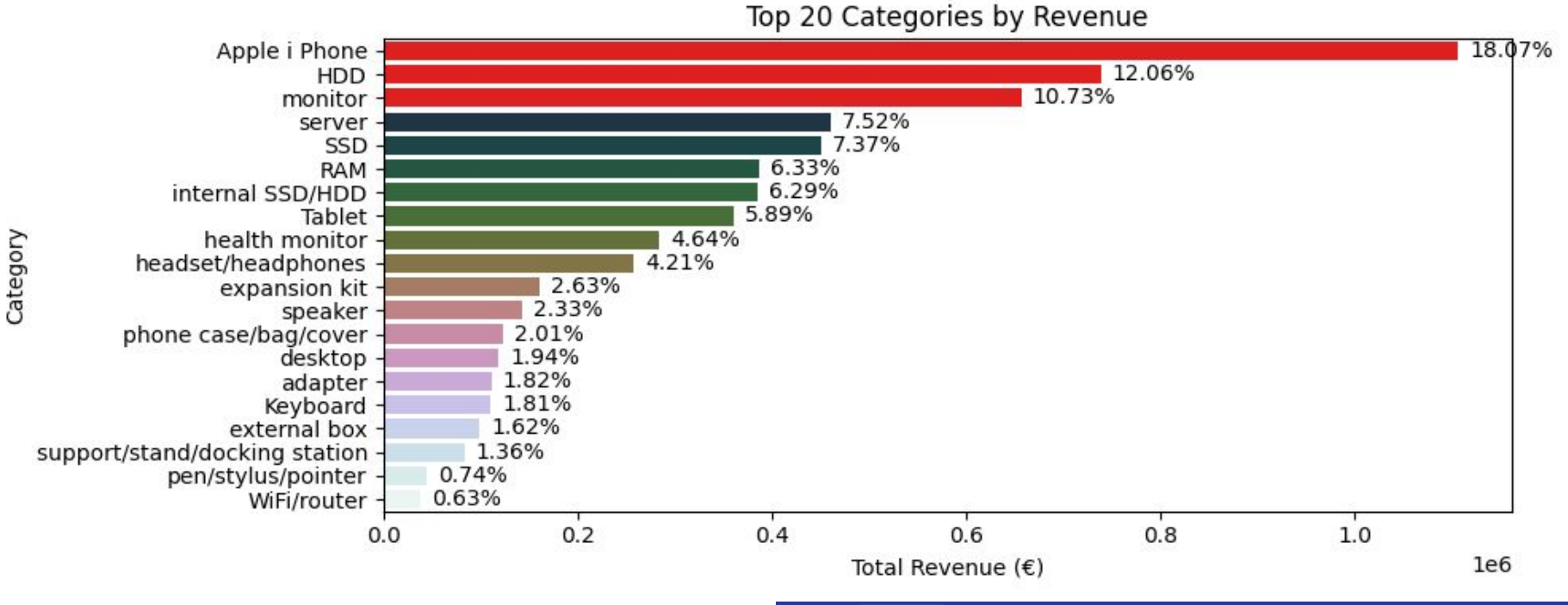
Most premium product categories

Discount distribution

Average discount across categories



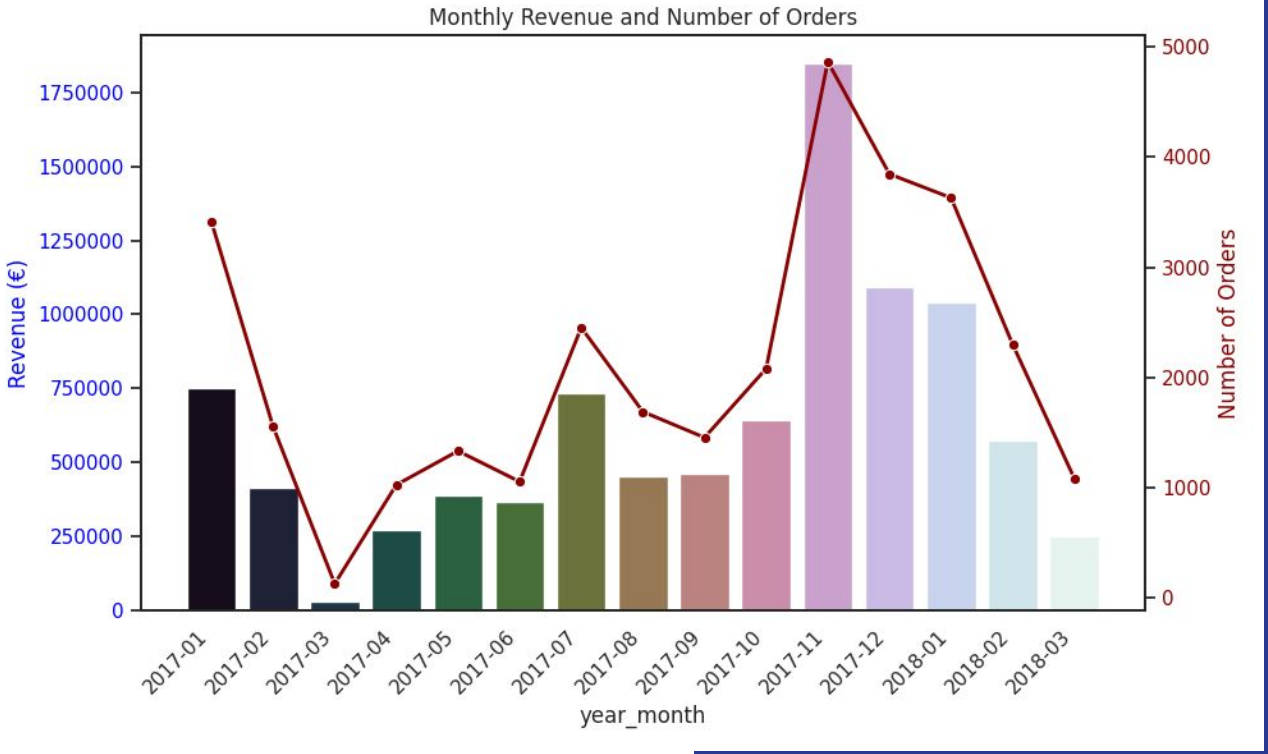
Revenue Analysis



Categories generating most revenue

Revenue Analysis

Number of orders influence total revenue



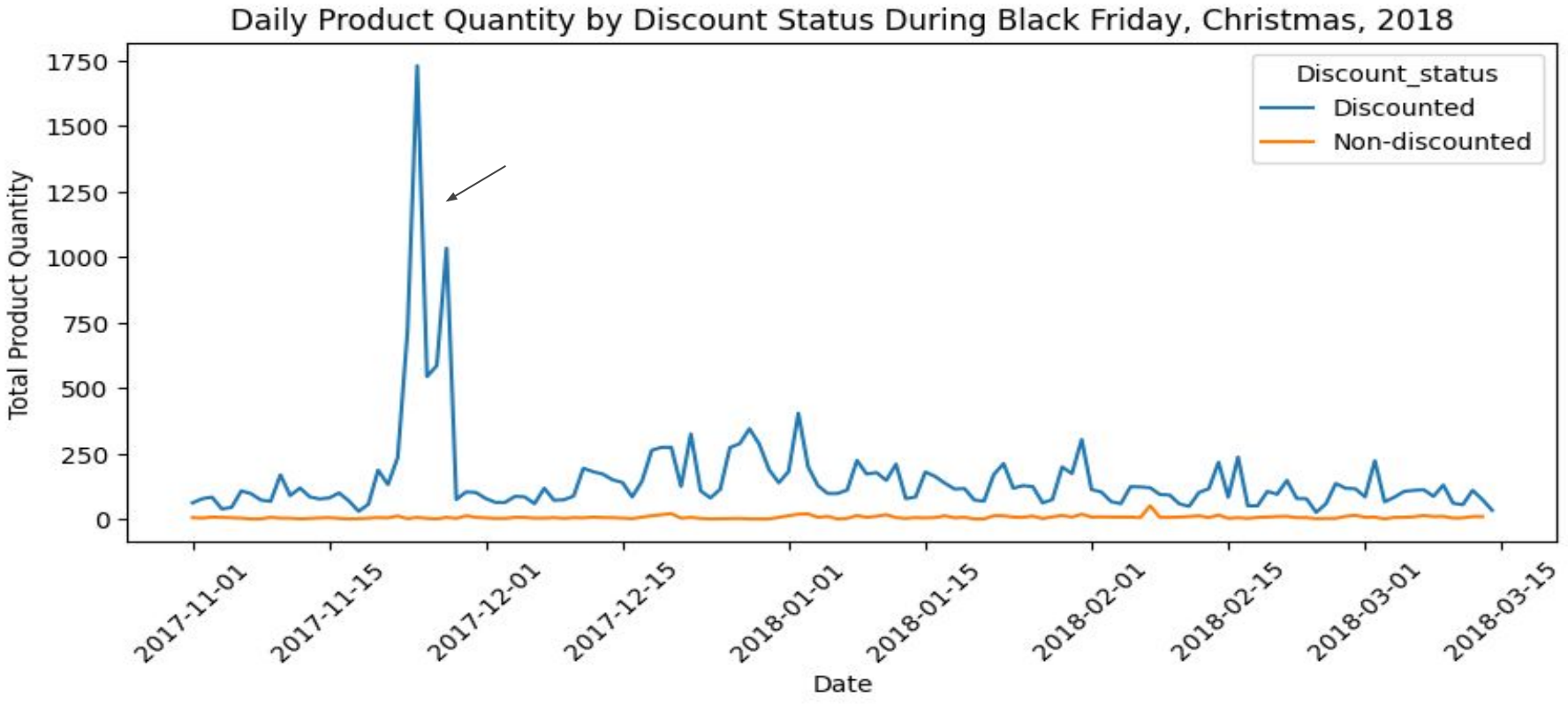
Factors influencing Revenue

Monthly evaluation

Price difference was evident! (June)

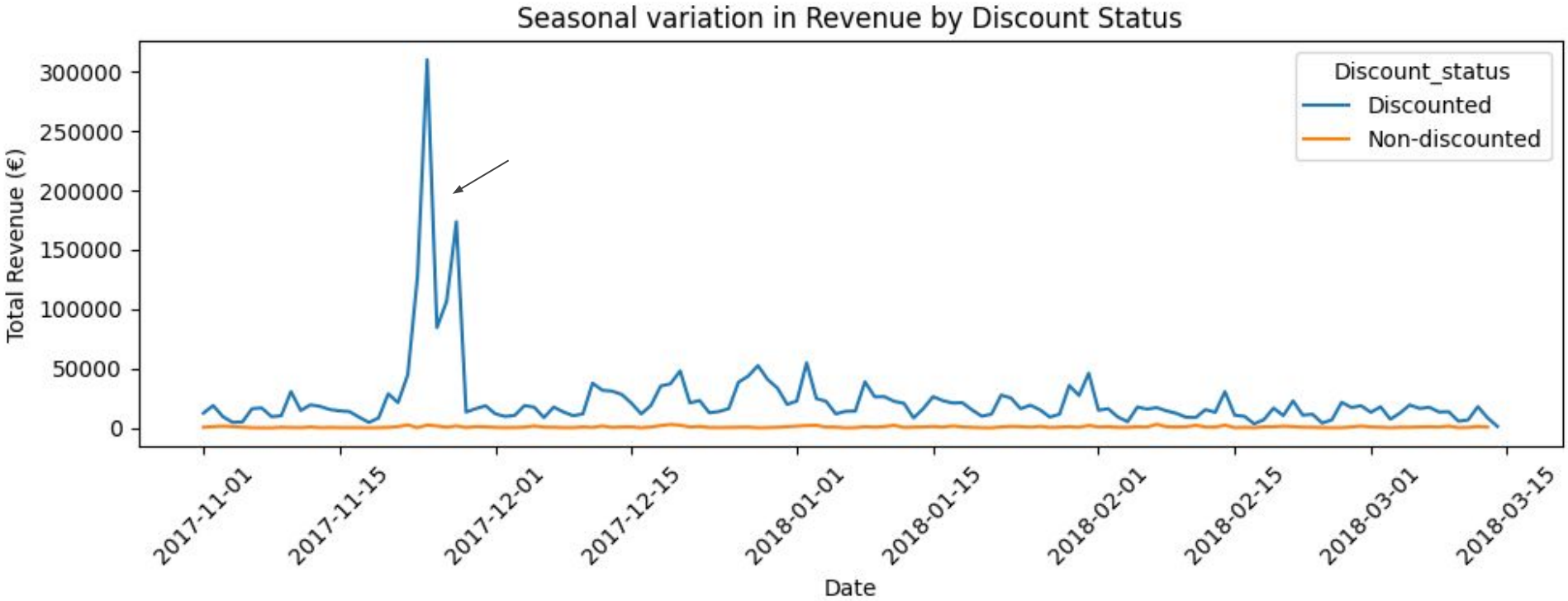
Seasonality & Trends

Approx. 1700 units sold!



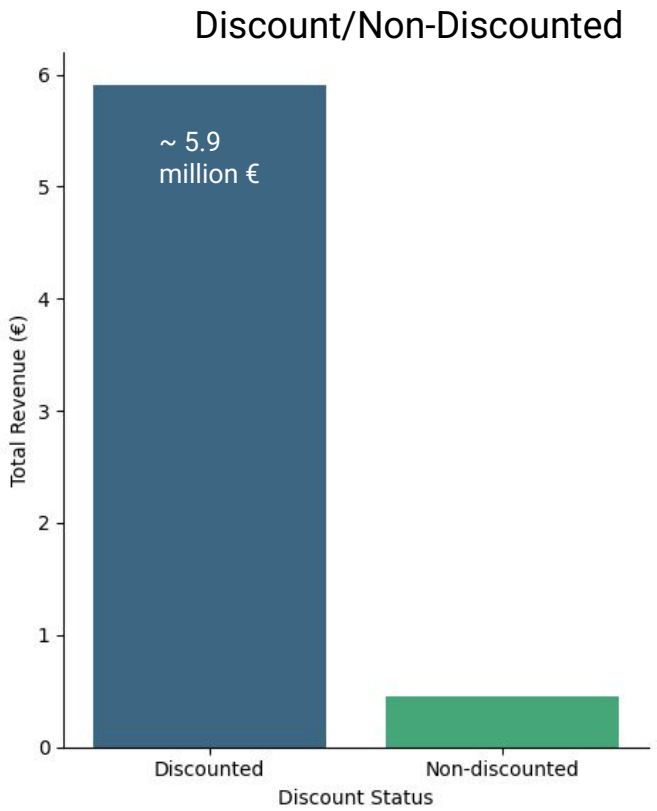
Seasonality & Trends

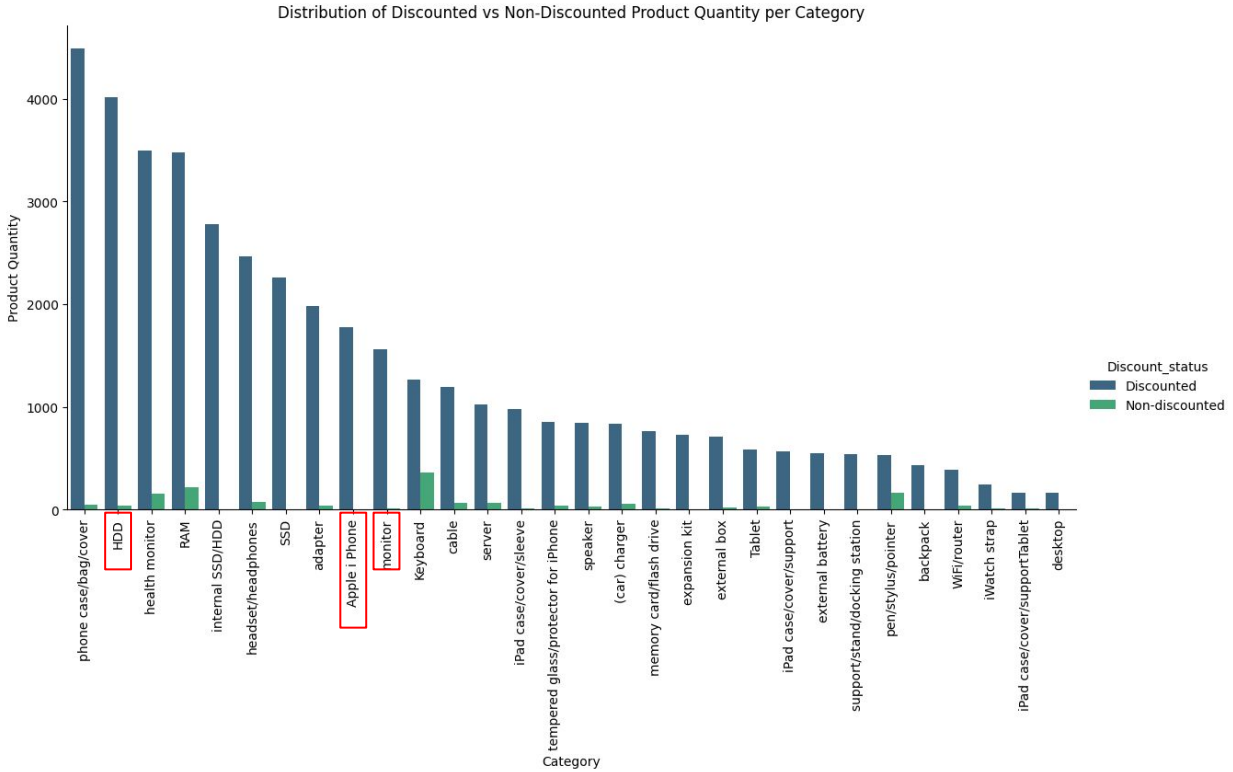
Customers spend more during holidays!



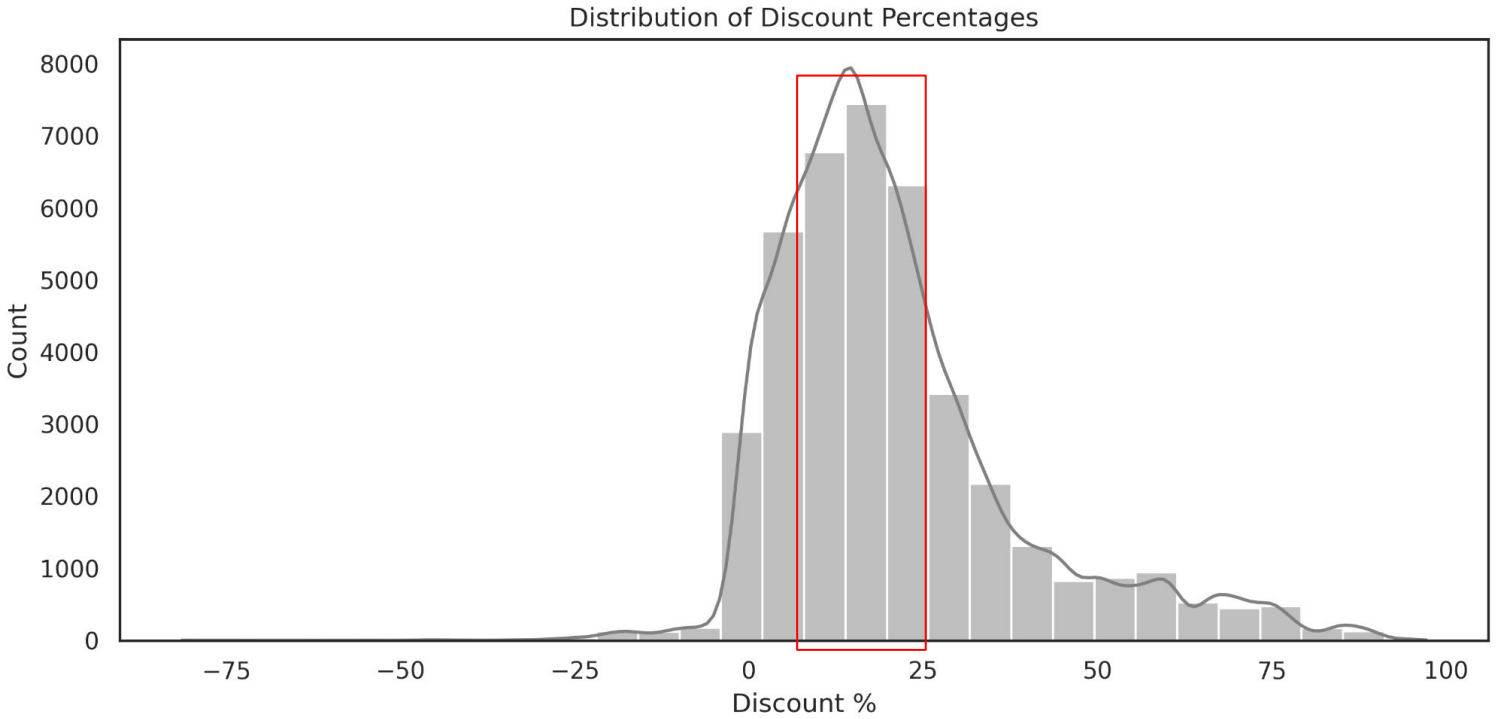
Revenue generation (Discount)

Business relies on discount pricing!





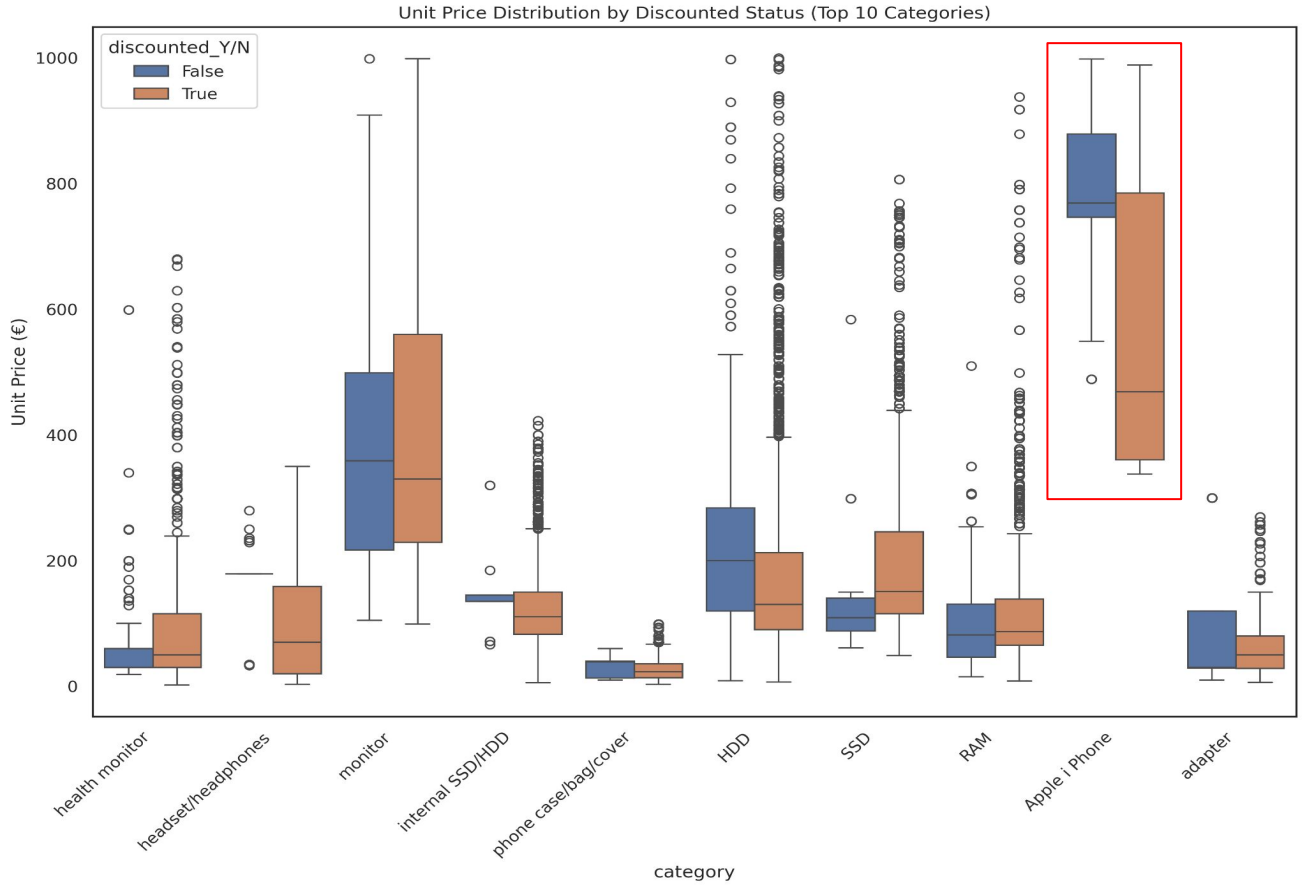
How are discounts offered on products?



Discount rate majority **10- 25 %**

Right-skewed distribution: fewer products receiving larger discounts

Distribution of sale price *(unit_price)* of Top 10 categories



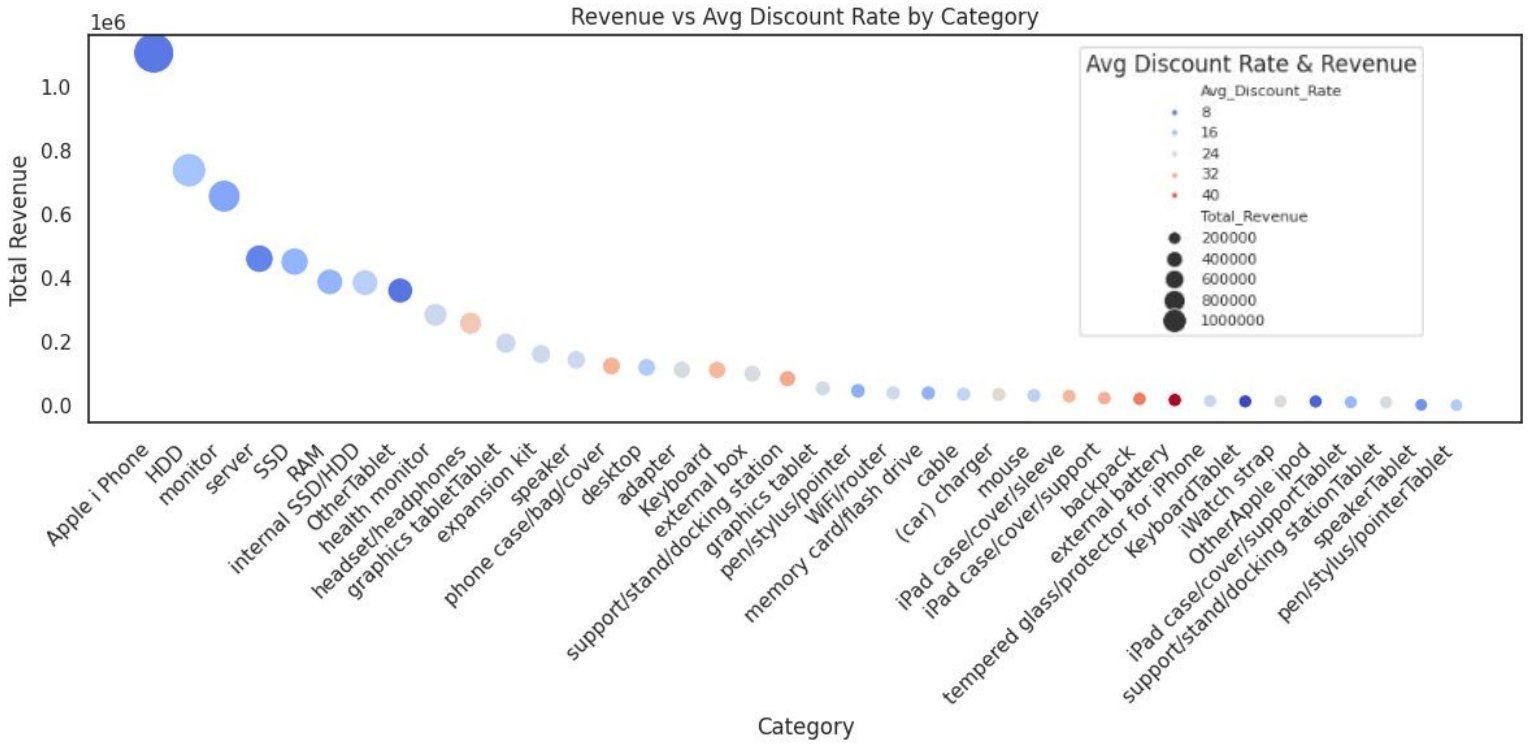
A long IQR and very low median for discounted iPhones:

- Extreme low Median iPhone: discounted price extreme lower
- Long IQR of iPhone: discounted prices are not uniform
- significant price variation even within the "discounted" group
- Sign of inconsistency

Outliers means unusually priced products, lack standards (monitor, HDD, RAM)

? Discounted box (also median price) higher than non-discounted box requires further investigation

Does higher discount by category lead to more revenue?

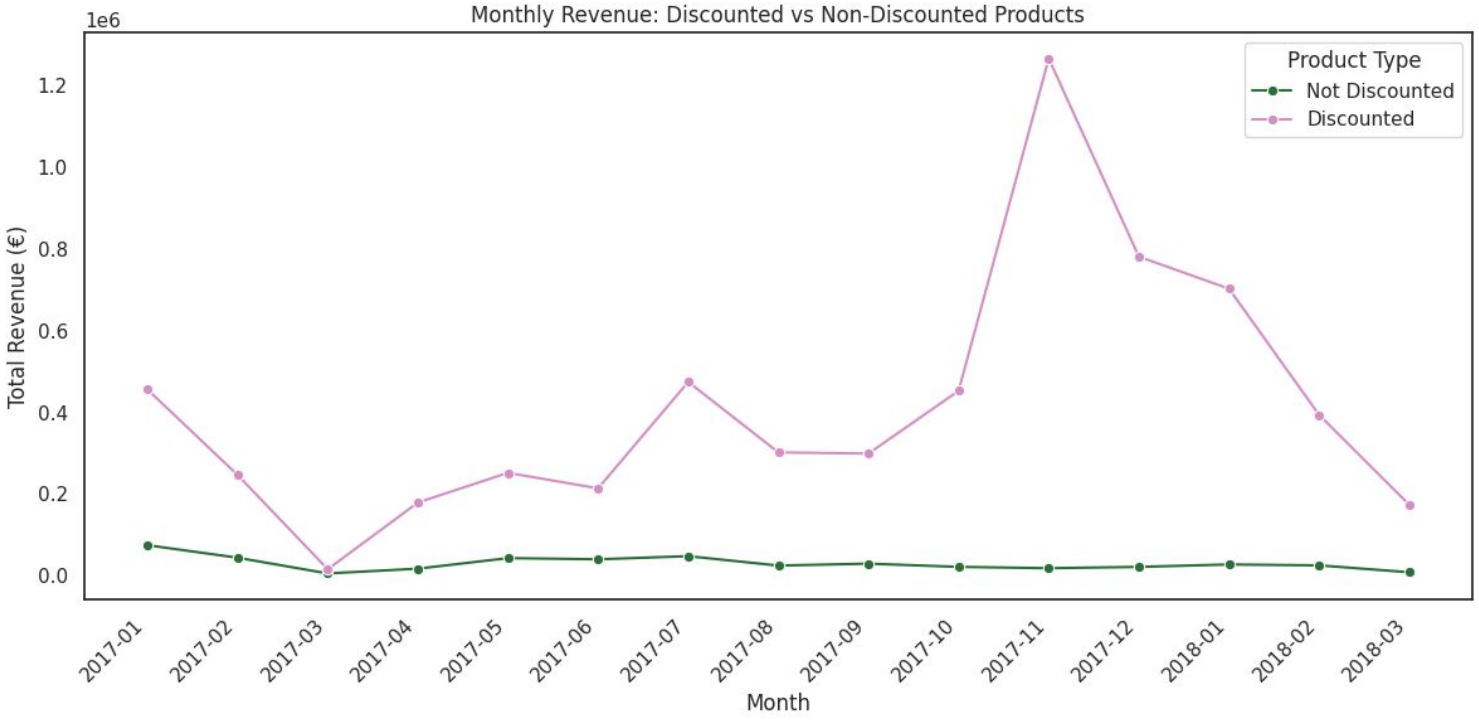


10–25% discounts generate the **highest total revenue** (iPhone, top revenue with minimal discount)

Very high discounts (>30%) do not consistently drive revenue (support, stand..)

Evaluate if huge discounts due to clearance, poor inventory, low demand?

Are discounted products generating more revenue over a period?



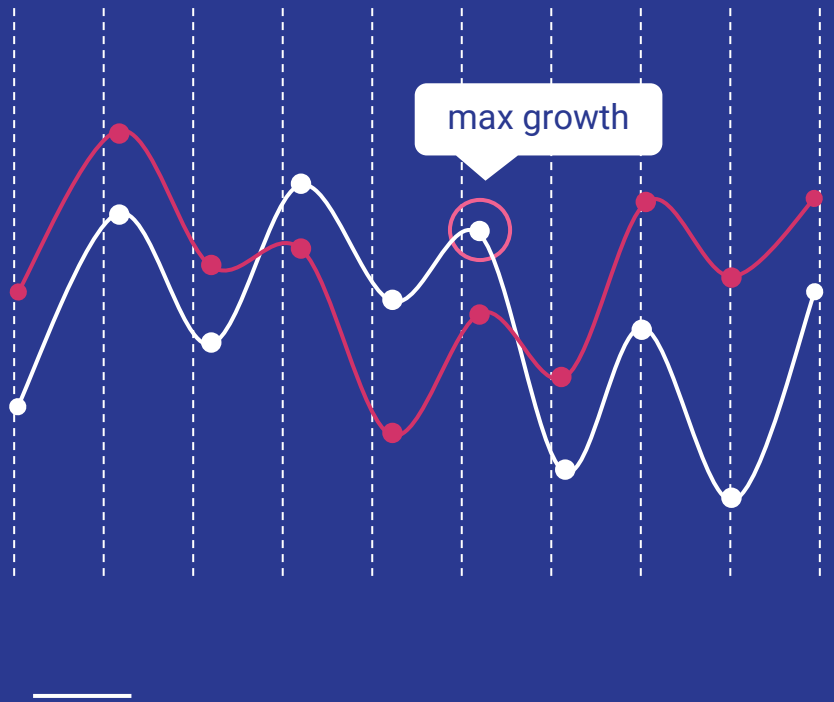
Discounting Is a **Major** Revenue Driver

Discounted product **revenue is consistently higher t**han non-discounted

Noticeable revenue spikes in January, July, and a peak Nov - Dec

Summary of findings:

- Discount rate 10 - 25% most effective at driving **higher revenue**
- ***iPhone Leads with Low Discount (8%):*** suggest strong demand & brand power, discount is strategic but is it essential?
- ***High Discount, Low Revenue Categories:*** several with **>30% discount** are **underperforming**, not generating proportionally higher revenue
- ***Limitation:*** missing cost data, not able to optimize discounting analysis



Strategic Recommendations:

- **Cost** is required to optimize discount strategy
- **Reevaluate** the Categories with **> 30 % discounts** but generating low revenue, **remove underperforming** categories?
- Investigate the product pricing structure, due to unusually priced HDD, SSD, RAM (extreme outliers)
- Promote categories within 10-25% discount range (top revenue drivers)
- iPhone is the revenue leader. Maintain iphone pricing & 8% discount. Appear strong, but is it really profitable?