

# Business Intelligence to Maximize profit through Product Selection



**Pamela Chakrabarty**

# Business Scenario

## Objective:

Make recommendations for increasing company's profits

## Goals

Analyze the sales data and identify trends

Build customer-friendly end-to-end business intelligence system

Gain insights on current sales strategy

~~Prioritize marketing efforts for targeted products~~

## Limitations:

Discontinue products that are not profitable  
2 years of sales data is not enough to make a solid recommendation

No access to customers



# Deliverables

**Business intelligence system** that integrates cross-functional data

**Interactive Dashboard** that tracks Key Performance Indicators (KPI) and business metrics

**Recommendations** to enhance profitability



# Product Profitability and Sales

# Main Analysis Parameters

Sales Profit Margin

Sales Profit

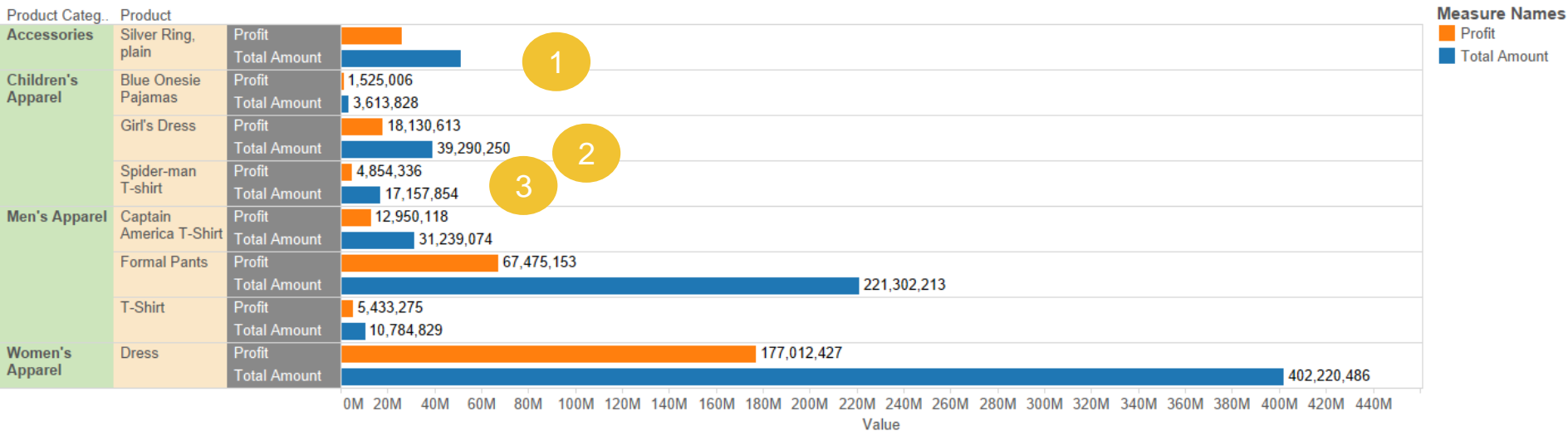
Sales Quantity

Year

Day of the week

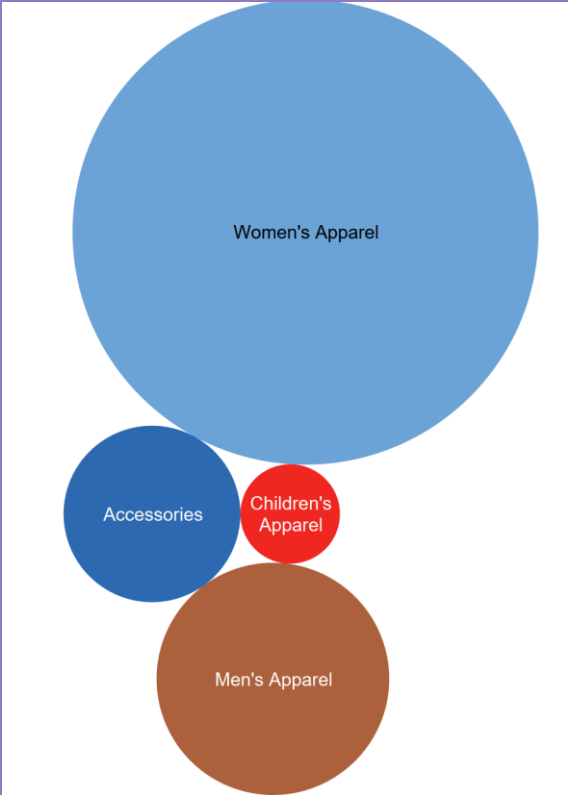
# Product Analysis: Total Sales and Profit

## Total Profit and Sales

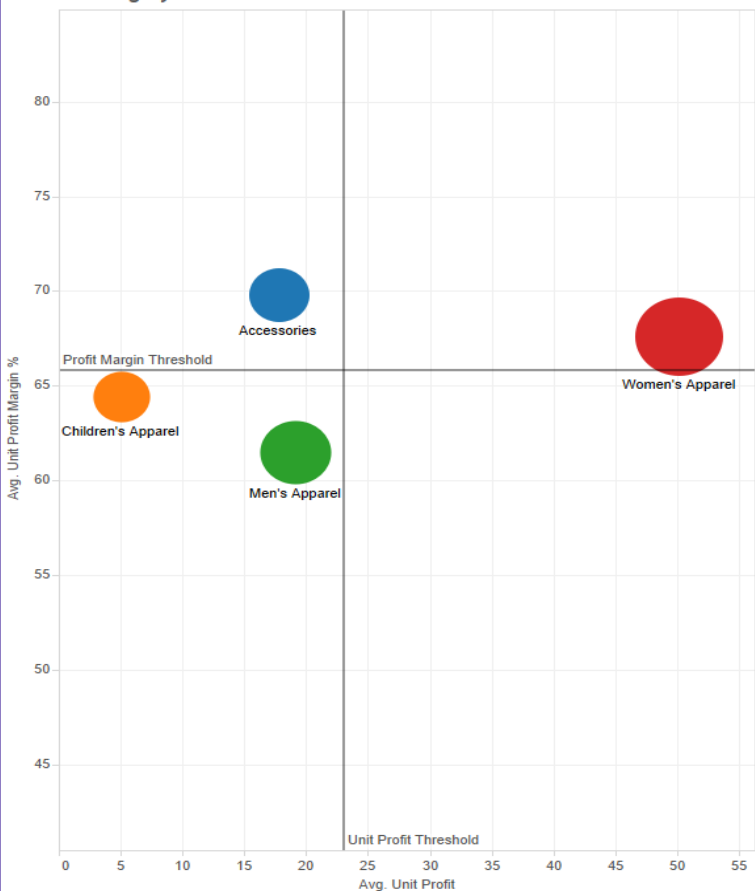


Blue Onesie Pajamas, Spider-man T-Shirt, Captain America T-Shirts

# Product Category Profitability



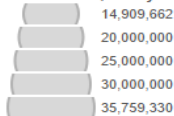
Product Category Performance



Product Category

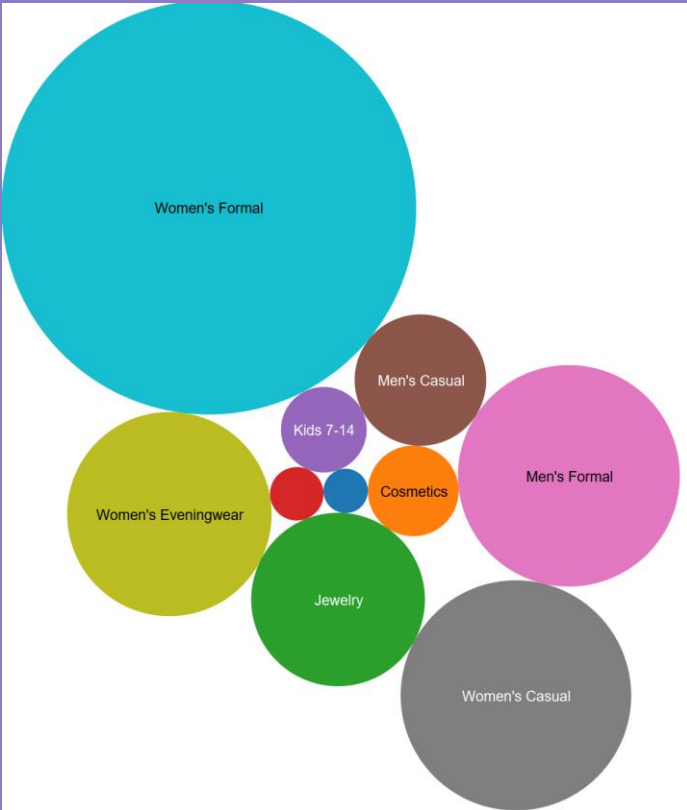
- Accessories
- Children's Apparel
- Men's Apparel
- Women's Apparel

Total Sales Quantity

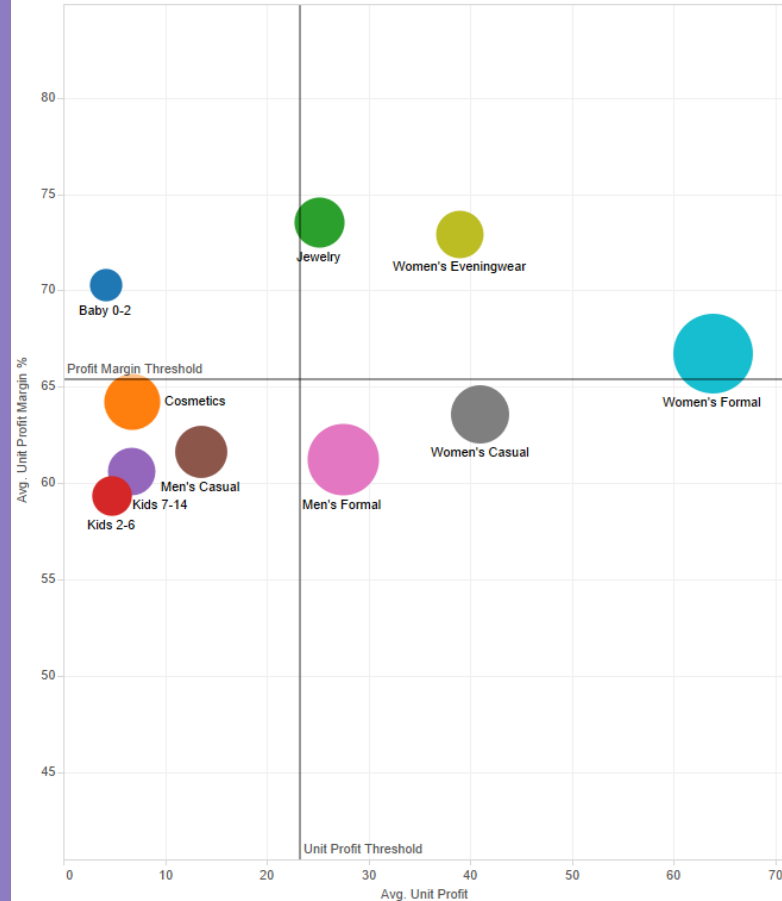


Product Category	Unit Profit	Avg. Unit Profit Margin %	Total Sales Quantity
Accessories	65,036	70	16,862,221
Women's Apparel	256,544	68	35,759,330
Children's Apparel	25,835	64	14,909,662
Men's Apparel	69,810	61	23,327,224

# Product Type Profitability



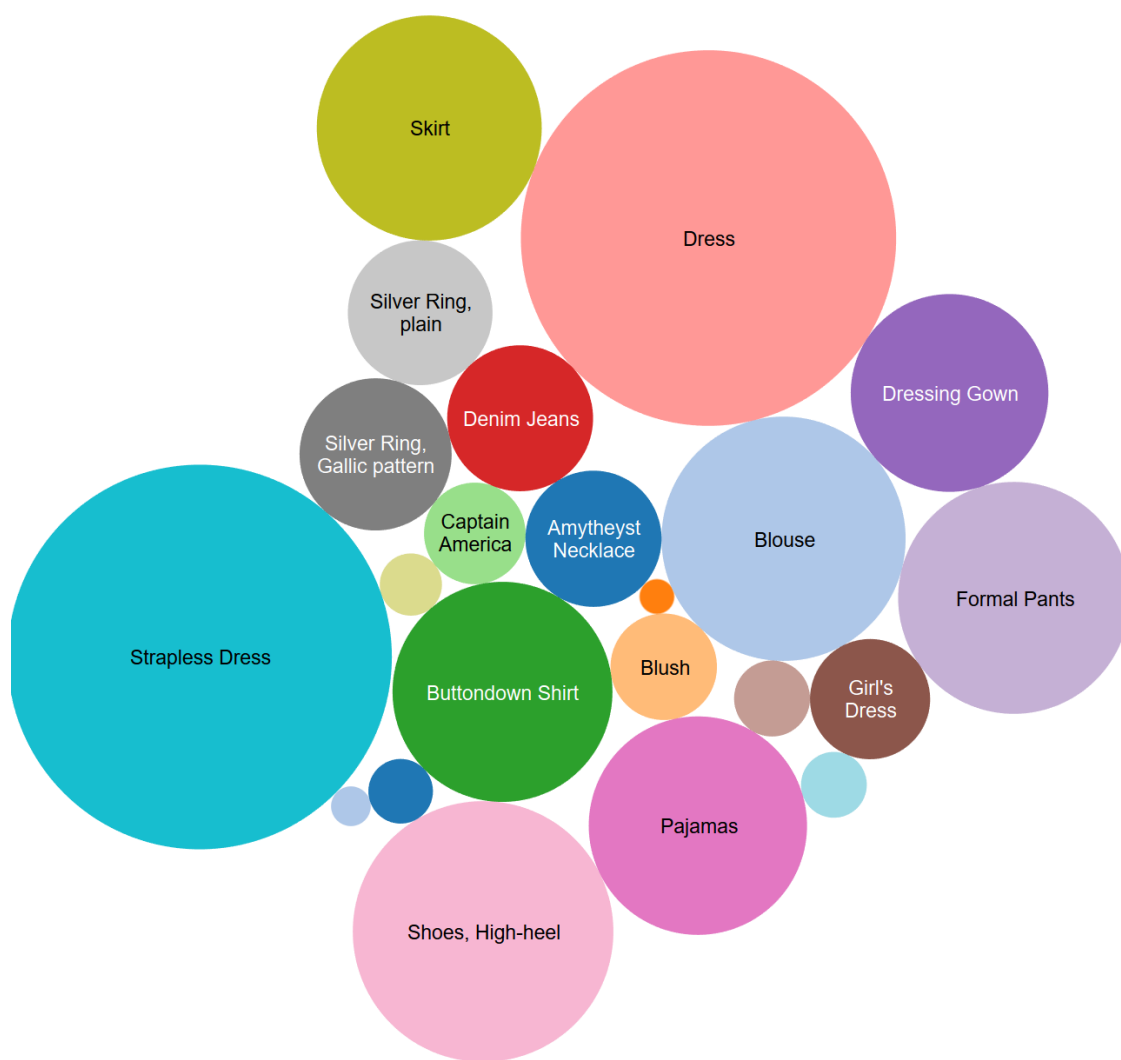
Product Type Performance



Product Type	Unit Profit	Avg. Unit Profit Margin %	Total Sales Quantity
Jewelry	55,225	74	7,491,170
Women's Ev..	56,925	73	6,748,508
Baby 0-2	9,103	70	3,151,384
Women's Fo..	139,773	67	18,910,962
cosmetics	9,811	64	9,371,051
Women's Ca..	59,845	64	10,099,860
Men's Casual	29,704	62	8,112,450
Men's Formal	40,106	61	15,214,774
Kids 7-14	9,811	61	7,022,961
Kids 2-6	6,920	59	4,735,317



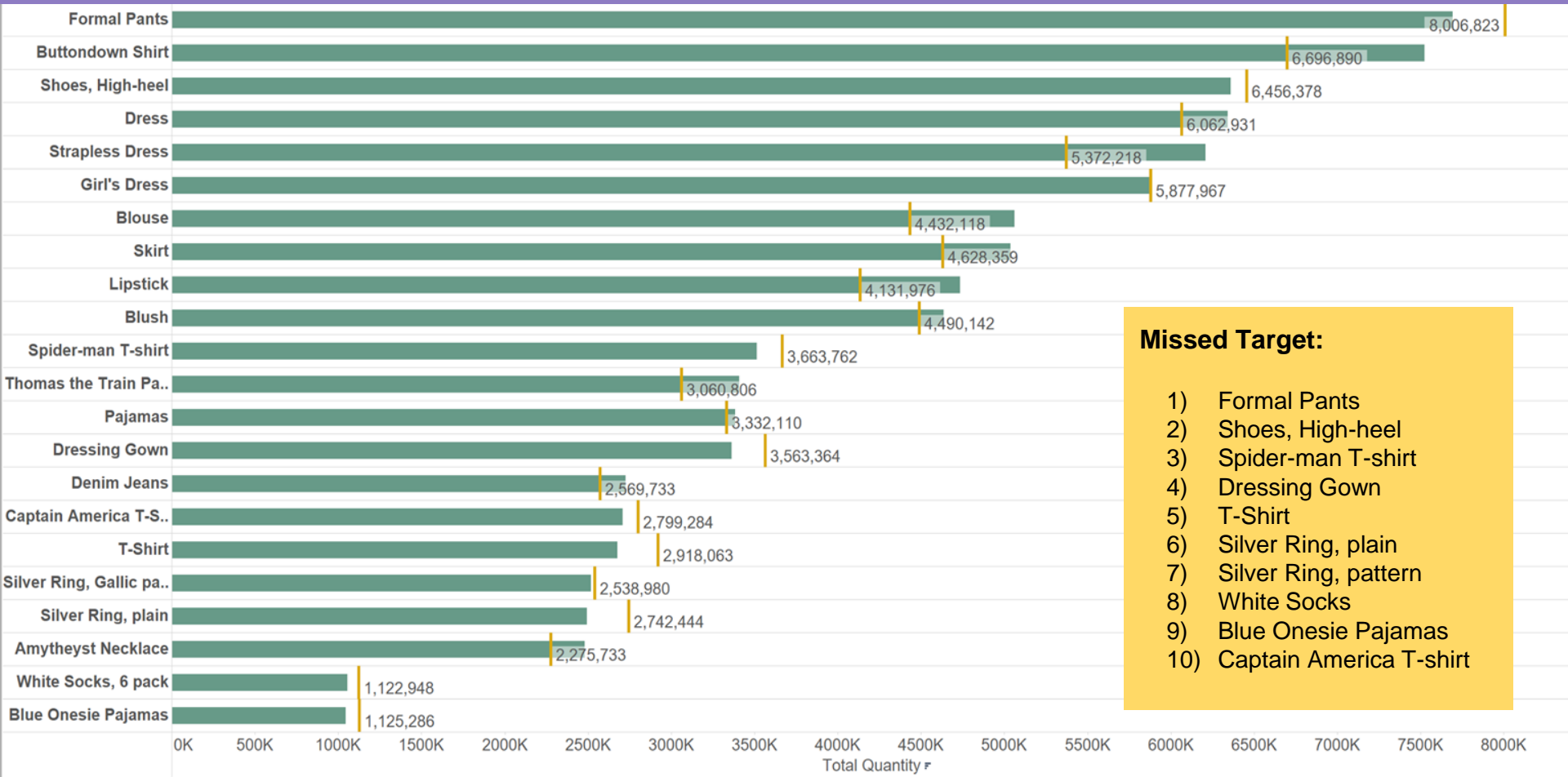
# Product Profitability



## Low Profitability:

- 1) Blue Onesie Pajamas
- 2) Captain America T-shirt
- 3) White Socks
- 4) Thomas the Train Pajamas
- 5) T-Shirt
- 6) Silver Ring, plain
- 7) Spider-Man T-Shirt
- 8) Lipstick

# Current Sales vs. Target Sales



- Missed Target:**
- 1) Formal Pants
  - 2) Shoes, High-heel
  - 3) Spider-man T-shirt
  - 4) Dressing Gown
  - 5) T-Shirt
  - 6) Silver Ring, plain
  - 7) Silver Ring, pattern
  - 8) White Socks
  - 9) Blue Onesie Pajamas
  - 10) Captain America T-shirt

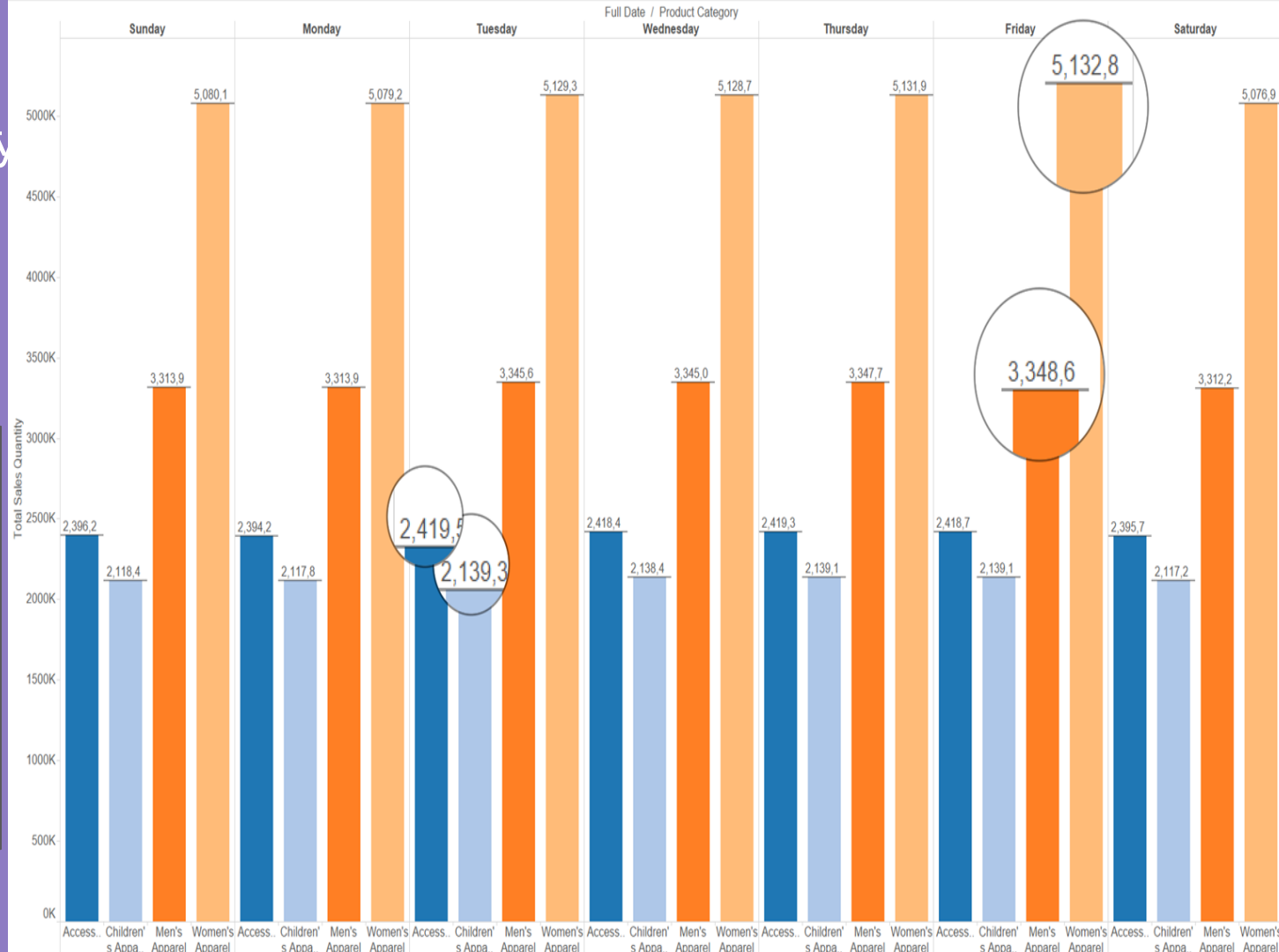


## Product Sales and Profit by Weekday

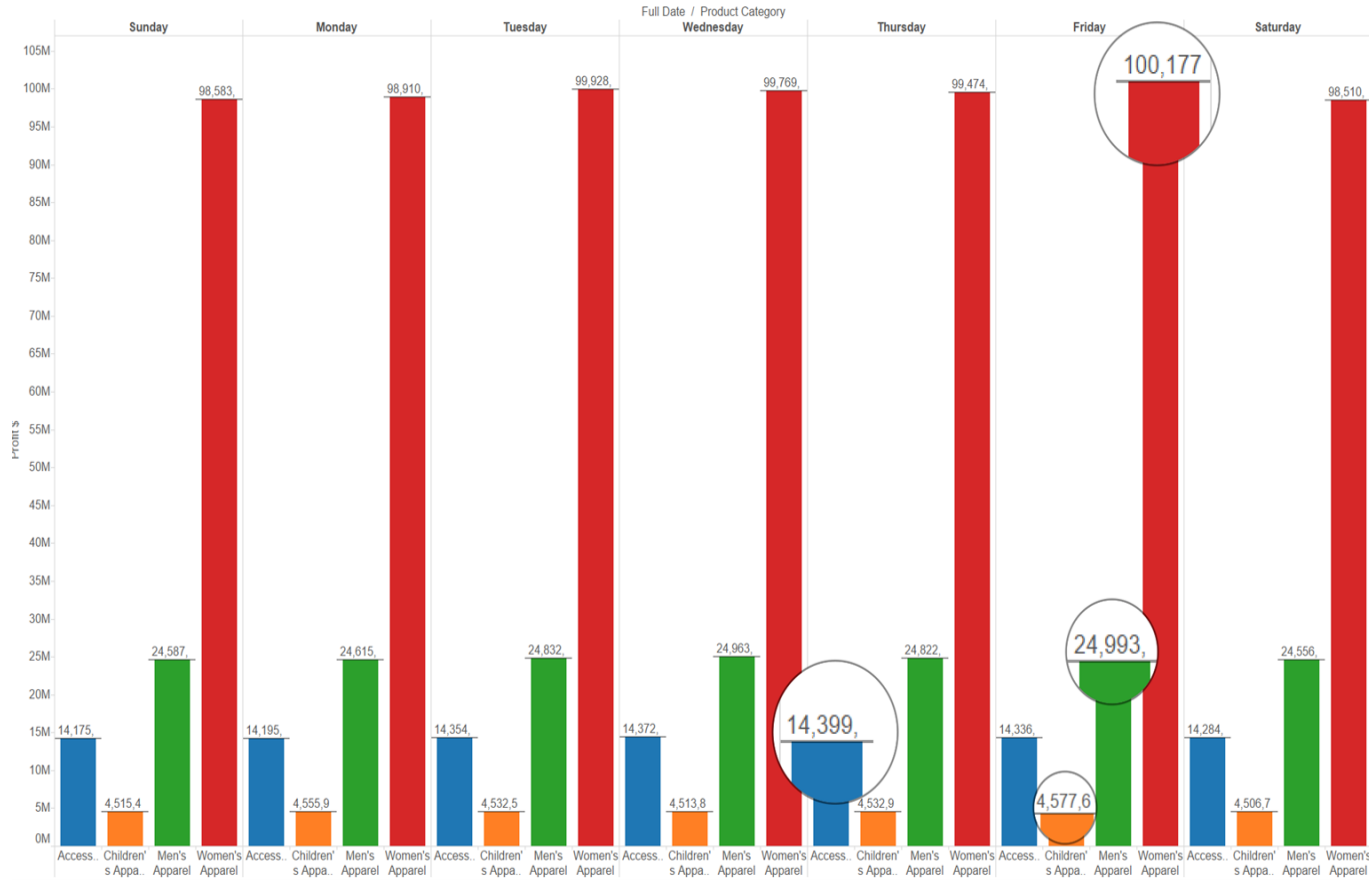
# Sales Quantity by Day of the Week

## Observations:

1. Women's Apparel, Men's Apparel sold more on Fridays
2. Accessories and Children's Apparel sold more on Tuesdays



# Sales Profit by day of week



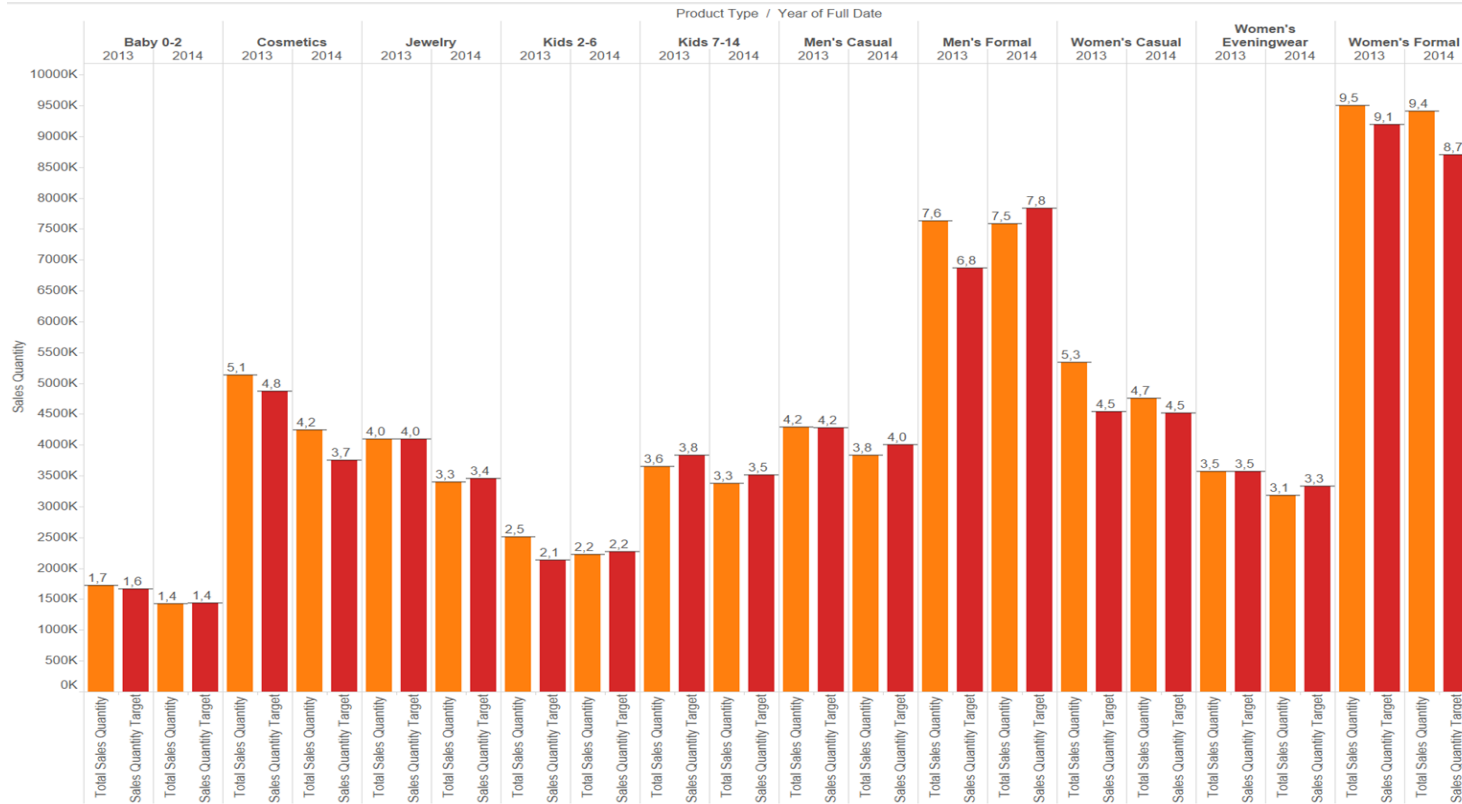
## Observations:

1. Women's Apparel, Men's Apparel and Children's Apparel made more profit on Fridays
2. Accessories gathered more profit on Thursdays



# Product Performance Over Time

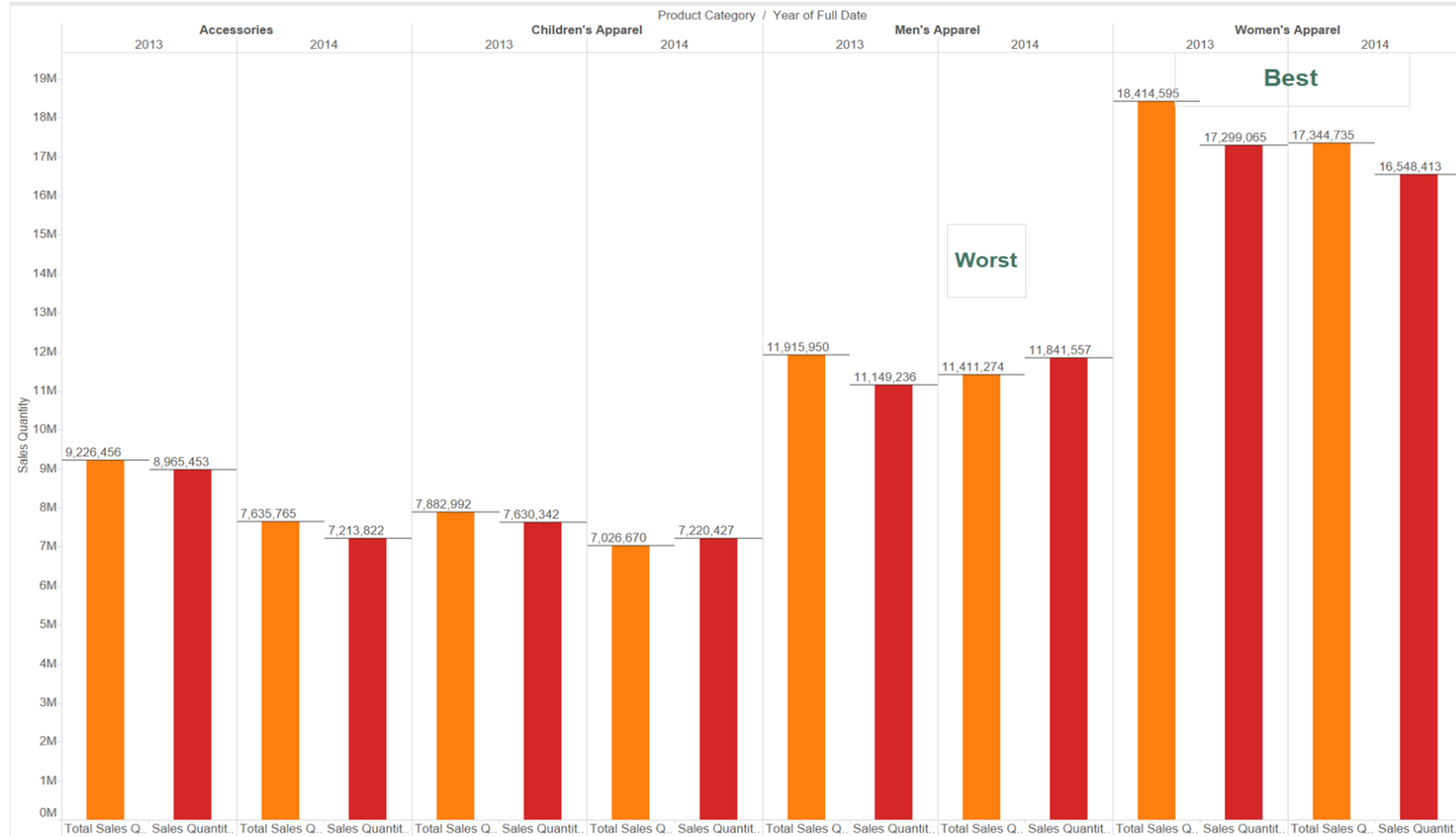
# Products Types in 2013 Vs. 2014



## Observations:

1. Cosmetics, Women's Casual and Women's Formal has met target in both 2013 and 2014

# Product Category in 2013 Vs. 2014



1. Women's Apparel met target sales in both years
1. Men's apparel did not meet the target 430283 quantity





# Recommendations

# Recommendations :

Promote products during peak time of the week, focusing on specific customer groups and product segments

## **Days of the week:**

### **Fridays:**

Men, Women

### **Tuesdays/Thursdays:**

Children and Accessories

Discontinue product lines that fail to meet target and generate low profitability

## **Products:**

Spiderman T-Shirt, Silver Ring  
Plain, White Socks, Blue  
Onesie Pajamas, Captain  
America T-Shirt

Allocate resources to products that have high growth rate or profitability and do not meet their targets

## **Products:**

Formal Pants, High Heels,  
Dressing Gown

Evaluate potential price increments for products that have met target sales but generate low profits

## **Price Increments:**

Denim Jeans, Blush