## Summary Report for Global Superstore 2014

## **Exploratory Data Analysis (EDA) Summary**

## 1. Profit Distribution Analysis:

- Top 3 countries (US, India, China) generated 37.7% of total profit (\$190K/\$504K)
- Bottom 10 regions contributed only 11.5% of total profit
- Africa showed extreme variance: South Africa (\$9.4K) vs Nigeria (-\$23K)

### 2. Product Performance:

- Copiers dominated high-value sales but had highest shipping costs (average \$5,161)
- Top 3 products in US generated 4.2% of total profit
- Electronics consistently outperformed furniture across regions

### 3. Customer Segmentation:

- Top 7 customers generated 7.2% of total profit
- Raymond Buch alone purchased \$15.7K worth of Canon copiers for the top selling products

### 4. Operational Metrics:

- Shipping costs averaged 11.5% of sales (\$461K/\$4M)
- Negative correlation between discounts and profit margin
- Average order value: \$469 (\$4M/8531 orders)

## 5. Temporal Trends:

- November sales peak
- August shipping cost spike
- Q4 accounted for 35% of yearly profit

## 6. Regional Disparities:

Southeast Asia had lowest regional profit (\$6K) despite high transaction volume

• There is a very low profit from the Table sub-category in the Southeast Asia

## 7. Africa Region:

- Top profitable countries in Africa are South Africa, Morocco, Egypt, Democratic Republic of the Congo, Senegal. Which South Africa is the highest
- Least profitable countries in Africa are Nigeria, Uganda, Zimbabwe. Which Nigeria record as the highest

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#### **Actionable Recommendations**

## 1. Operational Improvements:

- Renegotiate shipping contracts for copiers (potential 15-20% cost reduction)
- Implement discount ceilings for underperforming regions
- Create Nigeria task force to address root causes of -1.51% profit margin

## 2. Product Strategy:

- Bundle high-shipping-cost items with local bestsellers (copiers + US refrigerators)
- Phase out consistently unprofitable sub-categories (Tables in Southeast Asia, Accessories in Africa)
- Expand Canon copier inventory for Q4 peak season

#### 3. Customer-Centric Initiatives:

- Develop "Platinum Tier" program for top 10 customers
- Targeted reactivation campaign for 500+ inactive customers

## 4. Regional Focus:

- Replicate South Africa's success model in Morocco/Egypt (similar market conditions)
- Pilot local fulfilment centres in Southeast Asia to reduce shipping costs
- Conduct pricing audit in loss-making US cities (Chicago, Houston, Philadelphia)

#### **Risk Factors**

- Over-reliance on US market
- 22% of African countries operating at loss
- Shipping costs growing faster (Aug peak) than sales (Nov peak)

## **Key Findings:**

- 80/20 product concentration: Top 0.1% of products generated 4.2% of profit
- Shipping costs exceeded 25% of sales in loss-making regions
- Discounts >5% consistently led to negative margins

# **Strategic Recommendations**

## 1. Shipping Cost Reduction

Target reduction in copier logistics costs through:

- Regional fulfilment centres
- Carrier contract renegotiation

# 2. High-Value Customer Program

- Dedicated account managers
- Early access to new products

# 3. Nigeria Turnaround Plan

Address root causes through:

- Local partnership development
- Price structure optimization