

# **Improving Clothing Sales Using Data Analytics**

**Objective:** To use data analytics to bring out areas that call for improvement and develop strategies to amplify clothing sales.

## **Step 1: Plan**

### **Goal Setting**

The main aim is to ensure that clothing sales improve through the understanding of:

- Customer preferences
- Best selling items
- Underperforming items
- Seasonal clothing purchase trends
- How good the promotional activities are

### **Questions to Answer**

- What areas in clothing are performing well?
- What motivates the customers to make purchases?
- How do we optimize our inventory based on sales to meet demand?
- Which promotional activities increase sales?

### **Key Stakeholders**

- Business entrepreneurs
- Marketing team
- Inventory management team.

## **Step 2: Prepare**

### **Data Gathering**

- Sales Information: Monthly sales for each type of clothing product, such as T-shirts and jeans.
- Customer Information: Age, gender, location, and purchase history.
- Marketing Information: Details of previous promotions, discounts, and results of them.

- Web/App Information: Conducts customer behaviour in website and apps, such as clicks, search terms, and cart abandonment rates.

### **Sources of Data**

- Website and mobile app analytics tools.
- Surveys for customer feedback.
- Social media insights.

### **Data Preprocessing**

- Eliminate duplicate records.
- Missing values handling, for instance, fill the average value for missing sales.
- Standardize data formats (e.g., consistent date formats).

### **Step 3: Process**

#### **Data Transformation**

- Categorize the sales data according to clothing type, season, and location.
- Aggregate customer data by demographics (e.g., age groups).
- Combine data from diverse sources (e.g., POS and social media).

### **Tools**

- Excel: For initial cleaning and summarizing.
- SQL: To merge and query large datasets.
- Python/R: For in-depth data manipulation and visualization.

### **Step 4: Analyze**

#### **Techniques**

##### **Descriptive Analytics:**

- Identify best-selling items and low performing categories.
- Determine the seasonal peaks (e.g., increased dress sales during summer).

##### **Predictive Analytics:**

- Forecast quarter to date using historical data.
- Forecast outcomes of future promotions.

##### **Customer Segmentations:**

- Market customers using demographics and purchasing behaviour.

## **Insights**

- Jeans and casual wear are best-selling items among the young generation.
- Group of people who would be response-oriented towards email promotions falls within 25 to 34 years.
- Winter clothing out-of-stocks is common in northern regions.
- Social media campaigns yield more engagement than traditional advertising campaigns.

## **Step 5: Share**

### **Reporting and Visualization**

- Representing findings on dashboards.
- Sales trends by category (line charts).
- Regional performance (geo-maps).
- Customer segments (bar graphs).
- Share a summary report with actionable insights for stakeholders.

## **Tools Used**

- Power BI/Tableau: To create dynamic dashboards.
- MS PowerPoint/PDF Reports: Sharing findings in meetings.

## **Step 6: Act**

### **Stock Optimization:**

- Increase stock of popular items during festival seasons.
- Reduce underperforming stock of certain categories.

### **Targeted Marketing:**

- Email Campaigns be targeted at young adults between 25-34 years of age.
- Increase social media advertisements to reach a larger audience.

### **Promotions:**

- On slow-moving stocks, offer discount.
- Personalized offers based on what a client has bought in the past.
- Implementation of Feedback
- Operationalize customer feedback through the redesigning and sizing of clothing.

## **Impact Measurement**

- Sales growth to previous quarters should be monitored.
- ROI (Return on Investment) for new marketing should be analyzed.
- Customer satisfaction should be measured through surveys.

## **Conclusion**

- Through the systematic progression of the Data Analytics Process, we can enhance garment sales using data-driven insights. We maximize inventory, meet customer preferences, and target marketing by systematically going through the Data Analytics Process.