

# Amazon Sales Analysis - Detailed Project Report

## 1. Sales Insights

*Objective: Identify top-performing categories, regions, and time periods to focus marketing and inventory efforts.*

DAX Code:

Top Categories by Sales =

```
TOPN(  
    10,  
    SUMMARIZE('Sales', 'Sales'[Category], "Total Sales", SUM('Sales'[SalesAmount])),  
    [Total Sales],  
    DESC  
)
```

Outcome: This DAX formula helps in identifying the top 10 product categories based on total sales. This insight can guide the team to focus on promoting high-performing categories.

## 2. Returns & Cancellations Analysis

*Objective: Analyze high return and cancellation rates by product type and fulfillment method to reduce losses.*

DAX Code:

Return Rate =

```
DIVIDE(  
    CALCULATE(COUNTROWS('Sales'), 'Sales'[Status] = "Returned"),  
    COUNTROWS('Sales')  
)
```

Outcome: The return rate metric helps highlight which categories or products have high return rates. This aids quality control and inventory planning.

## 3. Fulfillment Performance Comparison

*Objective: Compare performance between Amazon Fulfilled and Merchant Fulfilled orders in terms of on-time delivery and customer satisfaction.*

DAX Code:

On Time Delivery % =

```
DIVIDE(
    CALCULATE(COUNTROWS('Sales'), 'Sales'[DeliveryStatus] = "On Time"),
    COUNTROWS('Sales')
)
```

Outcome: This measure provides a clear comparison of delivery efficiency between different fulfillment types, helping to optimize logistics and service levels.

#### 4. Customer Segmentation (B2B vs B2C)

*Objective: Understand B2B vs B2C trends to tailor sales and promotions effectively.*

DAX Code:

B2B Sales =

```
CALCULATE(SUM('Sales'[SalesAmount]), 'Sales'[CustomerType] = "B2B")
```

B2C Sales =

```
CALCULATE(SUM('Sales'[SalesAmount]), 'Sales'[CustomerType] = "B2C")
```

Outcome: This analysis distinguishes customer behavior across B2B and B2C segments, helping customize campaigns and offerings accordingly.

#### 5. Inventory Optimization

*Objective: Use sales and return trends to avoid overstocking or stockouts.*

DAX Code:

Average Monthly Sales =

```
AVERAGEX(
    VALUES('Sales'[Month]),
    CALCULATE(SUM('Sales'[Quantity]))
)
```

Outcome: This calculation helps understand monthly trends and assists in maintaining appropriate inventory levels.