

## **Part 2 - Business intelligence and analytics tools**

### **Part A: Business Report for Tactical Managerial Decision**

**Question:** Should we offer an upgrade to home delivery, and if so, for which customer segment?

**Objective:** Maximizing customer satisfaction.

#### **Performance Metrics:**

1. **Importer Satisfaction Rate** – The number of satisfied importers per quarter as a percentage of the maximum possible satisfaction.
2. **Delayed Packages Rate** – The number of delayed packages per quarter divided by the total number of delivered packages in the same period.

#### **Filters:**

- **Time Range** (Year, Quarter)
- **Residential Area**
- **Delivery Method**
- **Age Group**
- **Satisfaction Rating**

#### **Filter Implementation:**

1. **Time Range:** Filtering via a **Drop-Down Menu**.
2. **Residential Area:** Filtering via a **Drop-Down Menu**.
3. **Delivery Method:** Filtering via a **Drop-Down Menu**.
4. **Age Group:** Filtering by selecting a row (or multiple rows) from a table.
5. **Satisfaction Rating:** Filtering via pie chart selection or clicking on a segmentation column (displayed as percentage satisfaction with a smiley icon).

Business Report for Tactical Managerial Decision Preview:

Should we offer a free home delivery upgrade to Importers on their next order?

Delivery Method

(All)

Region

(All)

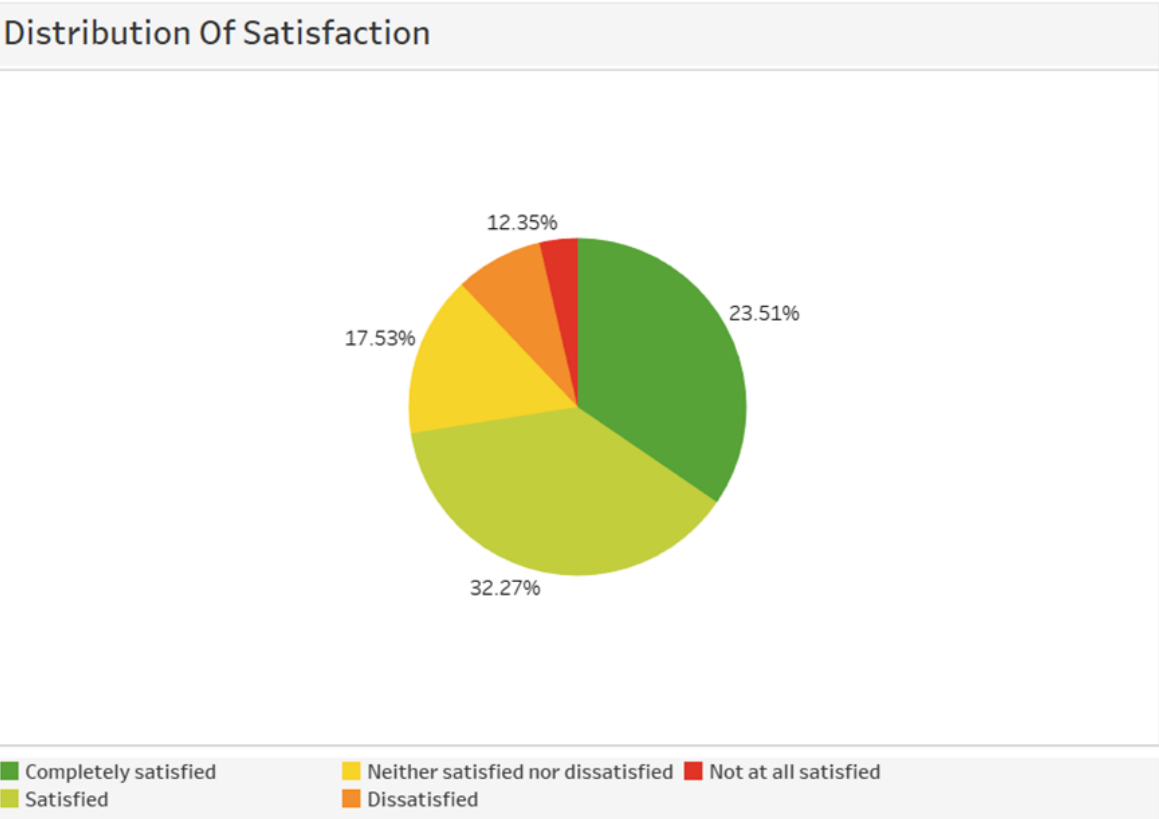
Year of Order Date

2022

Quarter of Order Date

Q1

Completely satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Not at all satisfied
23.51%	32.27%	17.53%	14.34%	12.35%



Total Importers	Total Orders	Satisfaction Percentage	Avg. Satisfaction Grade
225	251	68.05%	3.40

Importers Orders & Rating			
Age Group	Total Orders	Late Orders Percentage	Avg. Satisfaction Grade
20-30	37	10.81%	4.22
30-40	46	6.52%	3.74
40-50	48	6.25%	3.90
50-60	59	10.17%	2.88
61+	61	6.56%	2.77

## **Business Report for Strategic Managerial Decision**

**Question:** Should we conduct a bidding process to work with additional/alternative distributors?

**Objective:** Maximizing the effectiveness of the import process.

### **Performance Metrics:**

1. **Distributors' Delivery Capacity Rate** – The number of packages distributors can handle per month/multiple months/year, divided by the total number of packages for the same time period.

### **Filters:**

- **Time Range** (Year, Month)
- **Residential Area**
- **Package Delivery Timeliness** (On time or not)
- **Distributor**

### **Filter Implementation:**

1. **Time Range:** Filtering via a **Drop-Down Menu**.
2. **Residential Area:** Filtering via a **Drop-Down Menu**.
3. **Package Delivery Timeliness:** Filtering via a **Slider**.
4. **Distributor:** Filtering by selecting a row (or multiple rows) from a table.

Business Report for Strategic Managerial Decision Preview:

Should we conduct a tender for new DISTRIBUTORS?

Parcels Segments  
(All)

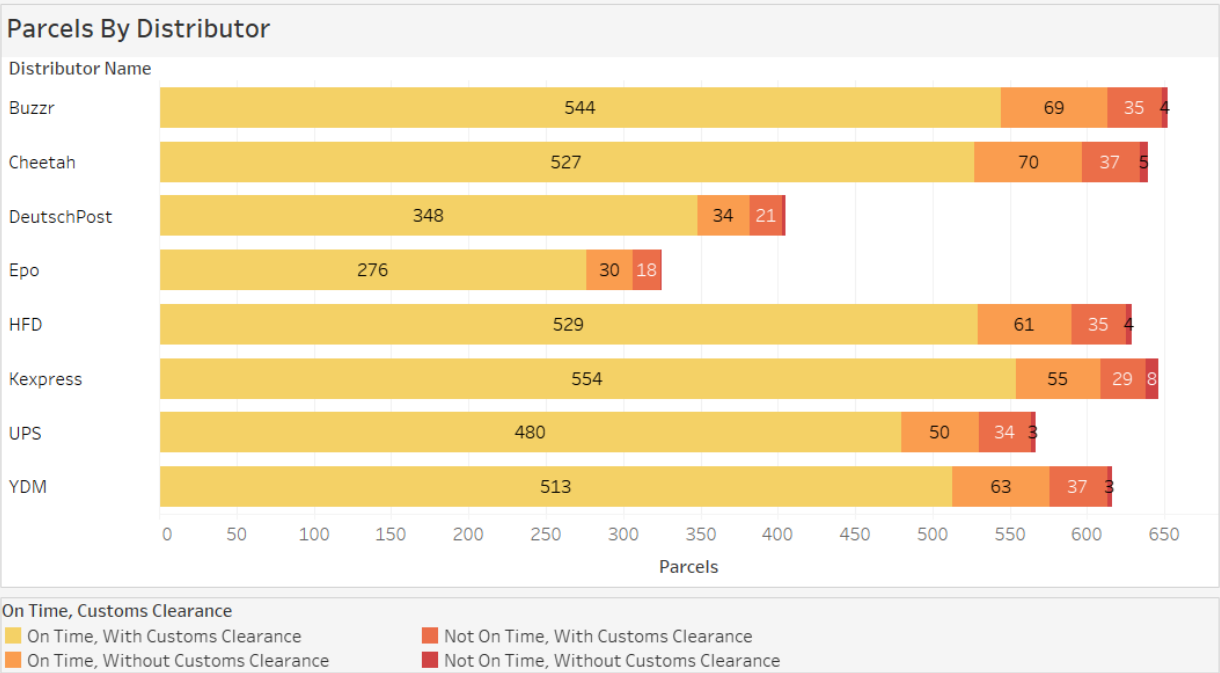
Month of Delivery Date  
(All)

Year of Delivery Date  
2020

Importer Region  
(All)

2020

Total Distributors	Total Parcels	Total Expenses	Total Parcels On Time
8	4,479	\$4,825.64	4,203



Utilization performance monitoring

Distributor Name	Max Parcels Per Month	2020	
		Amount Distributed	Utilization Percentage
Buzzr	100	652	54.33%
Cheetah	150	639	35.50%
DeutschPost	100	405	33.75%
Epo	80	325	33.85%
HFD	100	629	52.42%
Kexpress	180	646	29.91%
UPS	100	567	47.25%
YDM	200	616	25.67%

## Part B: Dashboard

A **dashboard** for senior management that provides a comprehensive overview of **organizational performance**, including **revenues, expenses, growth trends, and more**.

### Performance Metrics:

1. **Gross Profit Margin** (Revenue - Expenses) / Revenue.
2. **Market Share Percentage** – (Total orders processed by the company / Total customer (site) orders).

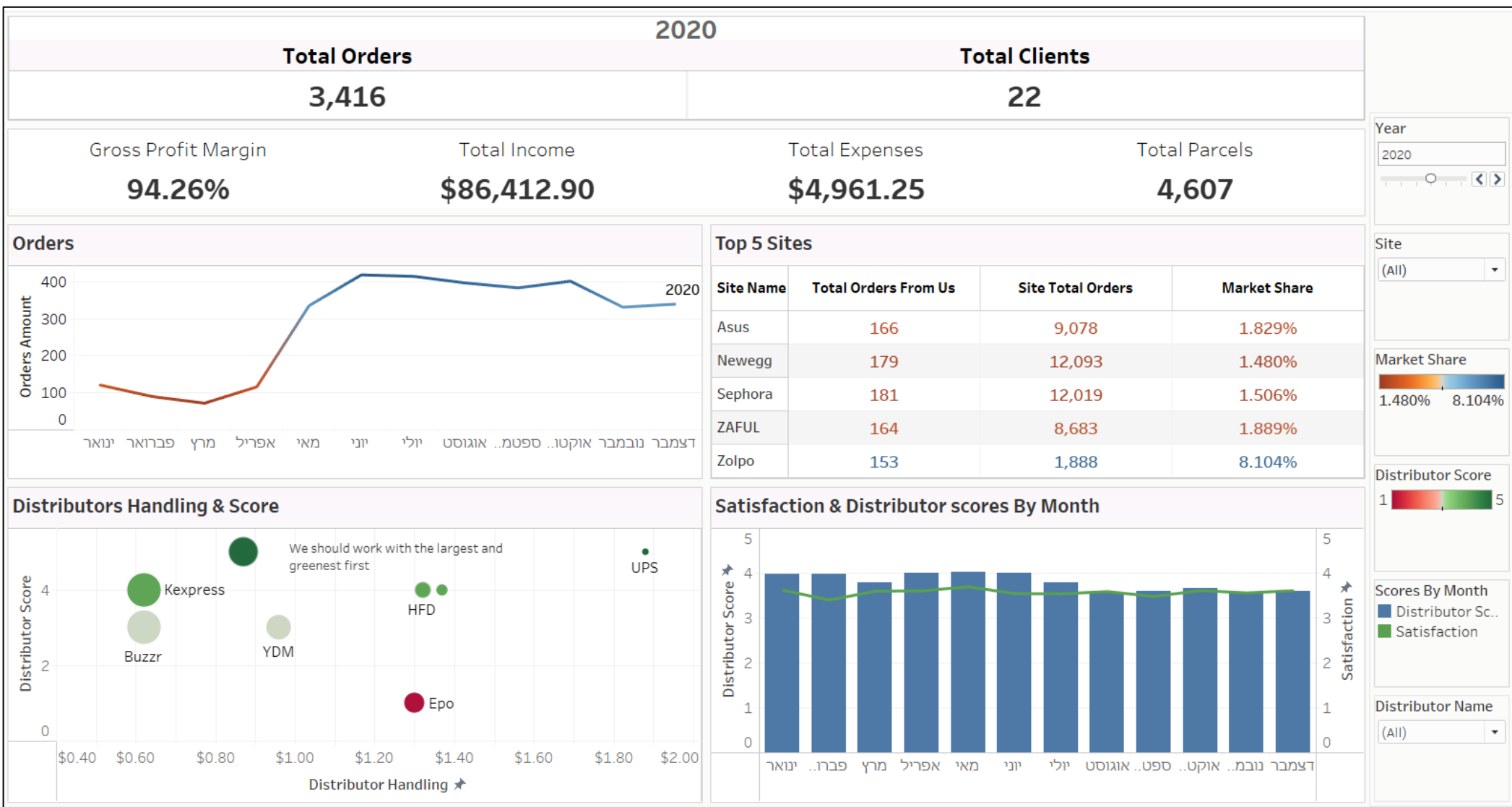
### Filters:

- **Time Range** (Year/Month)
- **Customer (E-commerce site)**
- **Distributor**

### Filter Implementation:

1. **Years:** Filtering via a **Slider**.
2. **Months:** Filtering by selecting a **time point in a Line Chart** or **clicking on a Bar Chart column**.
3. **Customers:** Filtering by selecting a row from a **table of customer sites** or via a **Drop-Down Menu**.
4. **Distributors:** Filtering via a **Drop-Down Menu**.

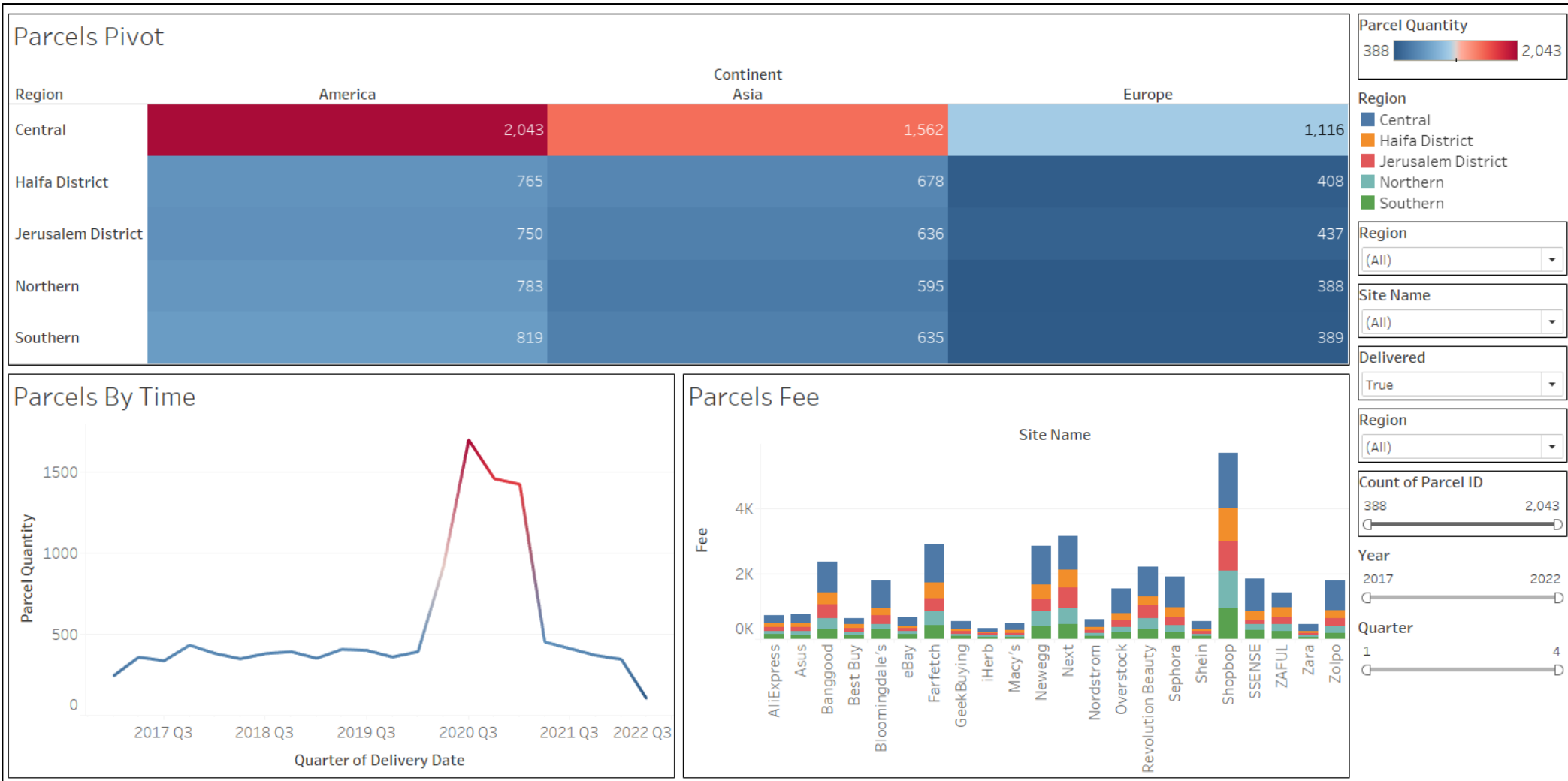
## Dashboard Preview:



## Part C: OLAP – On-Line Analytical Processing

For more information - see attached OLAP-StoryTelling.pptx

Preview:



## Part D: Advanced Visualizations

A **dashboard** created using **Excel** to provide a **comprehensive performance analysis** of e-commerce sites. The visualization integrates **financial statistics, fulfillment speed, satisfaction ratings, site experience, and fees** into an **interactive interface** that allows for detailed insights into site performance.

### Key Features:

- **Overall Performance Score** – A central metric aggregating key performance indicators into a **single percentage value**.
- **Breakdown of Performance Factors** – Individual metrics such as **fulfillment speed, satisfaction, site experience, fees, and site rating** are displayed in a **radial structure**.
- **Financial Statistics** – Real-time tracking of **monthly income, average revenue, and income targets**.
- **Top 10 Sites Analysis** – A **segmented ranking** of the highest-performing e-commerce platforms.
- **On-Time vs. Late Deliveries** – A **visual breakdown** of the percentage of **on-time vs. delayed shipments**.
- **Filter Options** – Selection of **years (2017-2022), individual e-commerce platforms, and monthly trends**.

### Business Insights:

1. **Performance Benchmarking:**
  - Identify **high-performing e-commerce sites** based on multiple evaluation criteria.
  - Highlight **areas of improvement**, such as fulfillment speed and site experience.
2. **Revenue & Market Insights:**
  - Assess trends in **monthly income and target achievements**.
  - Compare financial performance across different e-commerce platforms.
3. **Operational Efficiency:**
  - Monitor **on-time vs. late deliveries** to evaluate the reliability of fulfillment processes.
  - Use performance scores to **refine logistics and service strategies** for each platform.

This Excel-based **interactive dashboard** serves as a **powerful decision-support tool** for management, allowing for **data-driven analysis and strategic planning** based on **real-time performance metrics**.



## Preview:

