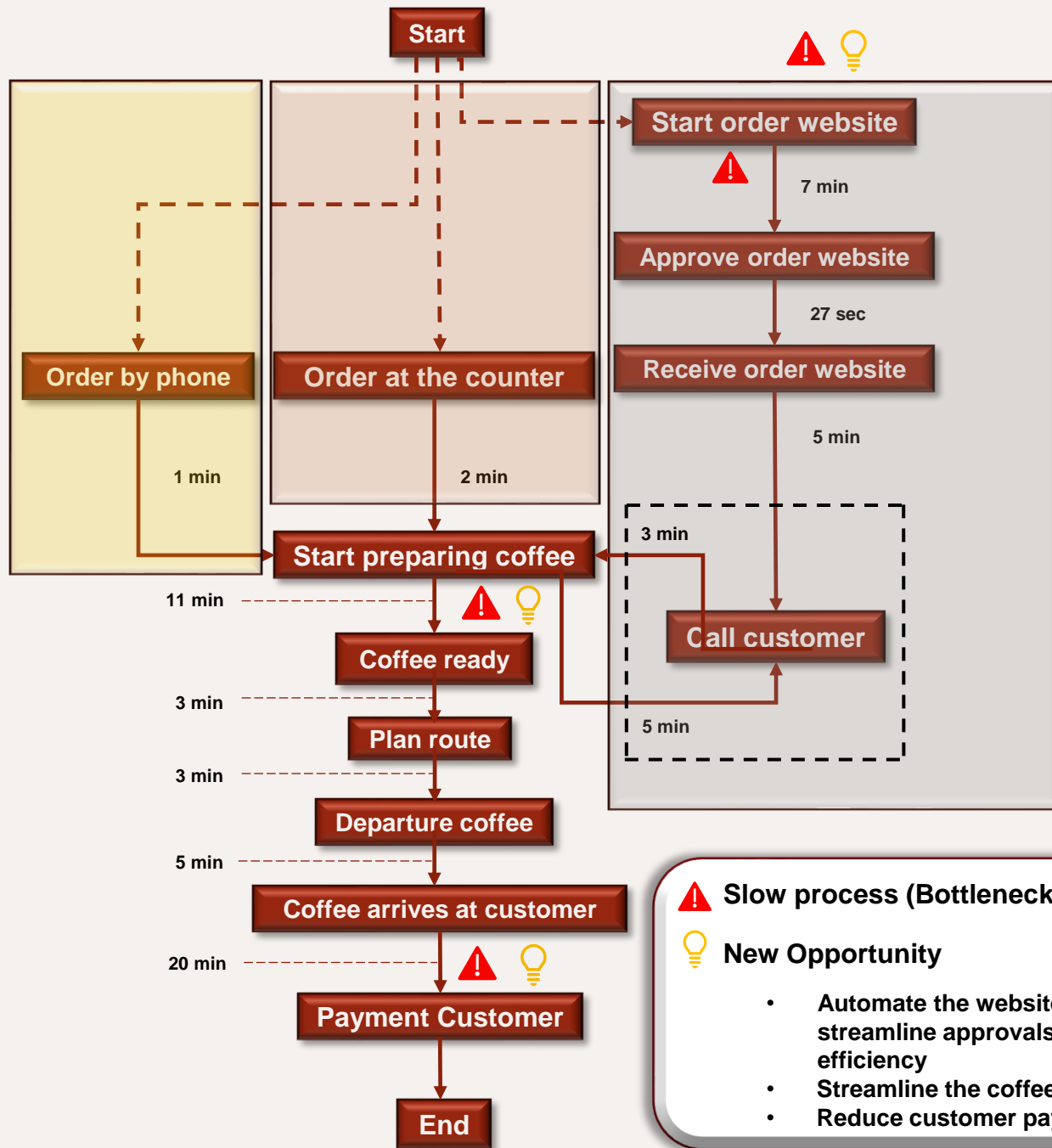




# SIPPING ON INSIGHTS

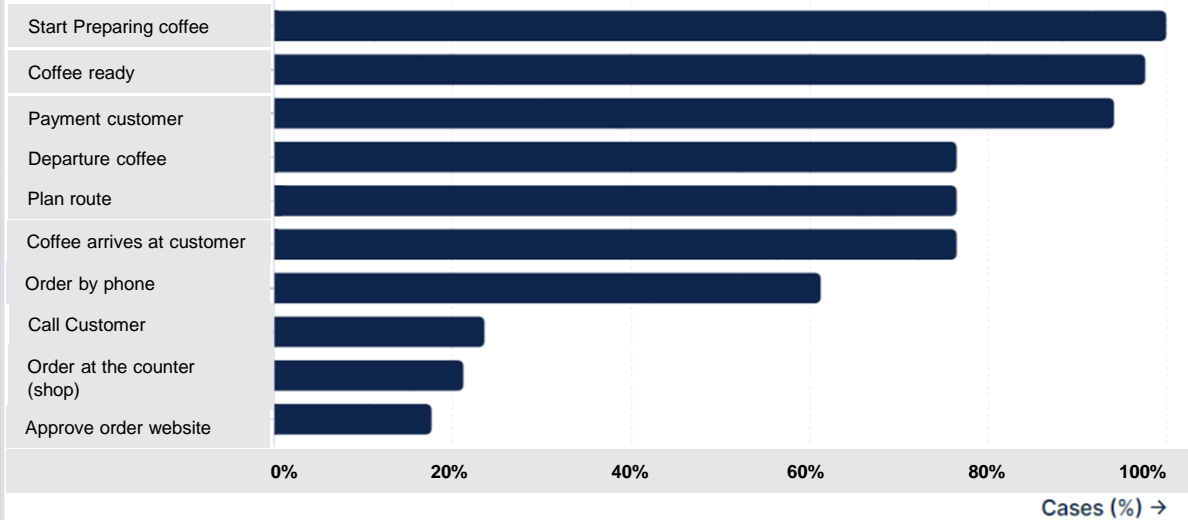
**Name: Isha Dipesh Prajapati**

**Date: 25-10-2024**



# DESCRIPTIVE ANALYSIS

## Activity frequency



Average Activity Occurred **7**

## ⚠️ Slow process (Bottlenecks)

## 💡 New Opportunity

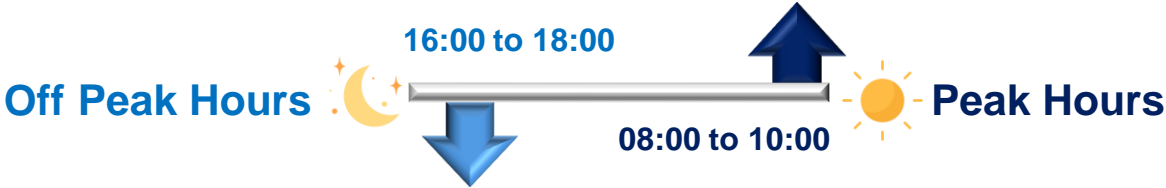
- Automate the website order verification process to streamline approvals, minimize delays, and boost efficiency
- Streamline the coffee preparation process
- Reduce customer payment processing time

AVERAGE THROUGHPUT TIME



**41 minutes**

# PREDICTIVE ANALYSIS

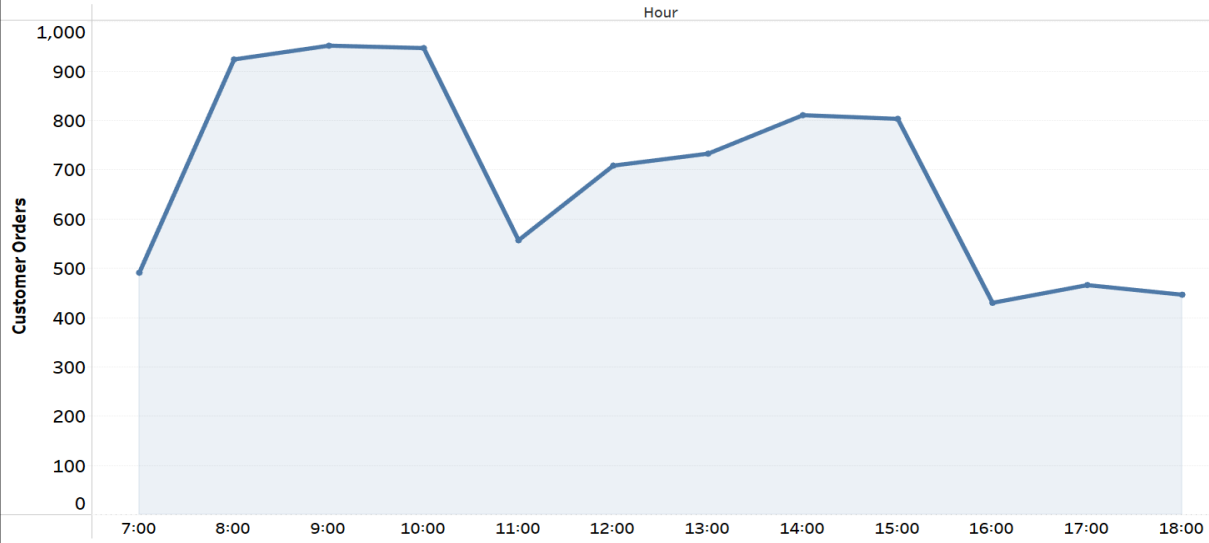
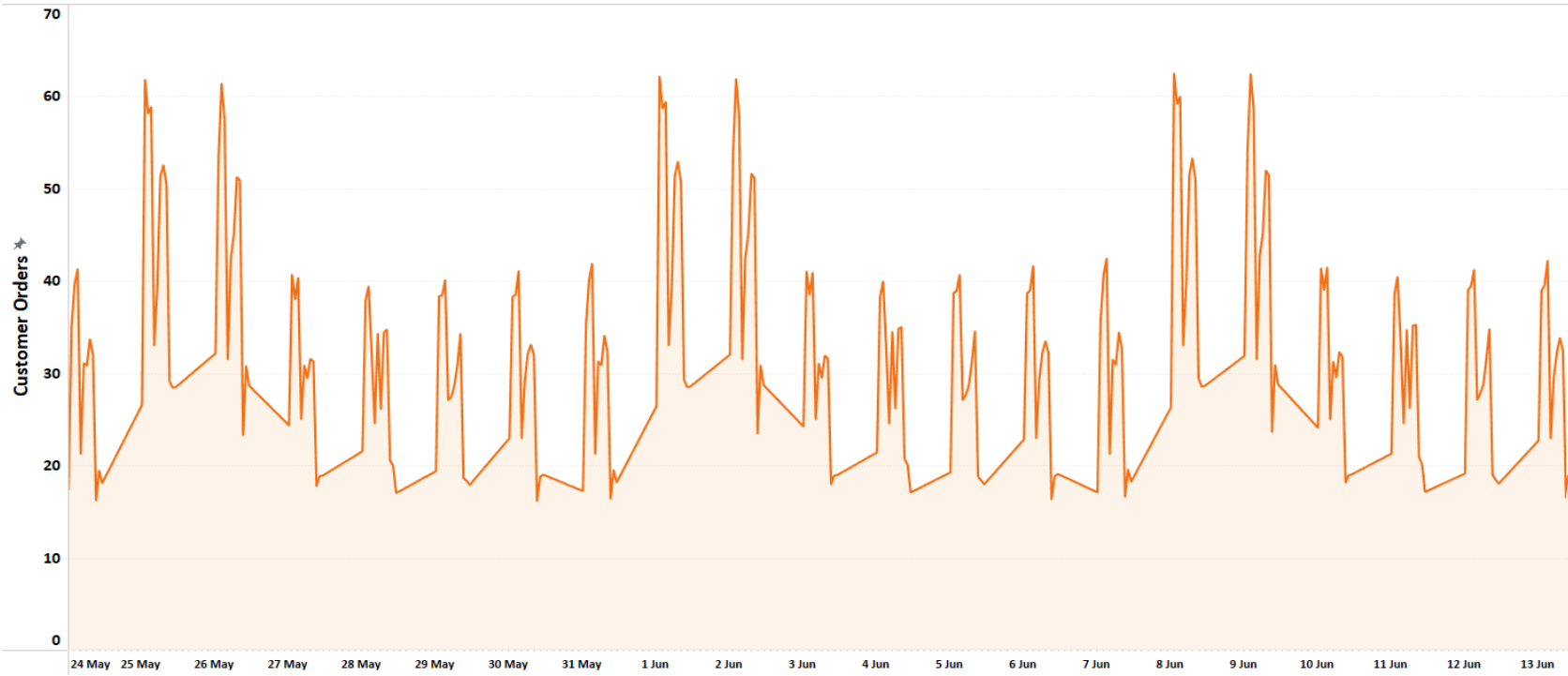


Offer discounts to customers to visit during off-peak hours

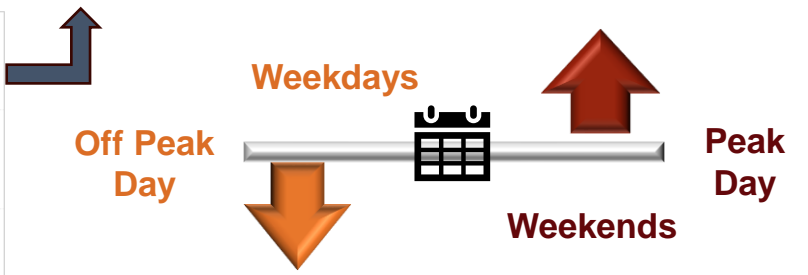


Optimize staffing from 8-10 AM, especially on weekends, to meet higher demand.

Datetime Forecast Data for the Next 3 Weeks



Overall Hourly Forecast Data for the Next 3 Weeks



Error Statistics	Date Value	Time Value
Mean Absolute Error (MAE)	1.22	4.48
Root Mean Squared Error (RMSE)	1.53	5.51

**MAE :**  
Average of how far off our predictions are from actuals

**RMSE :**  
Similar to MAE but gives more importance to larger errors

## Highest Number of Orders Predicted on



08 Jun, 2019

## Courier Hiring Cost

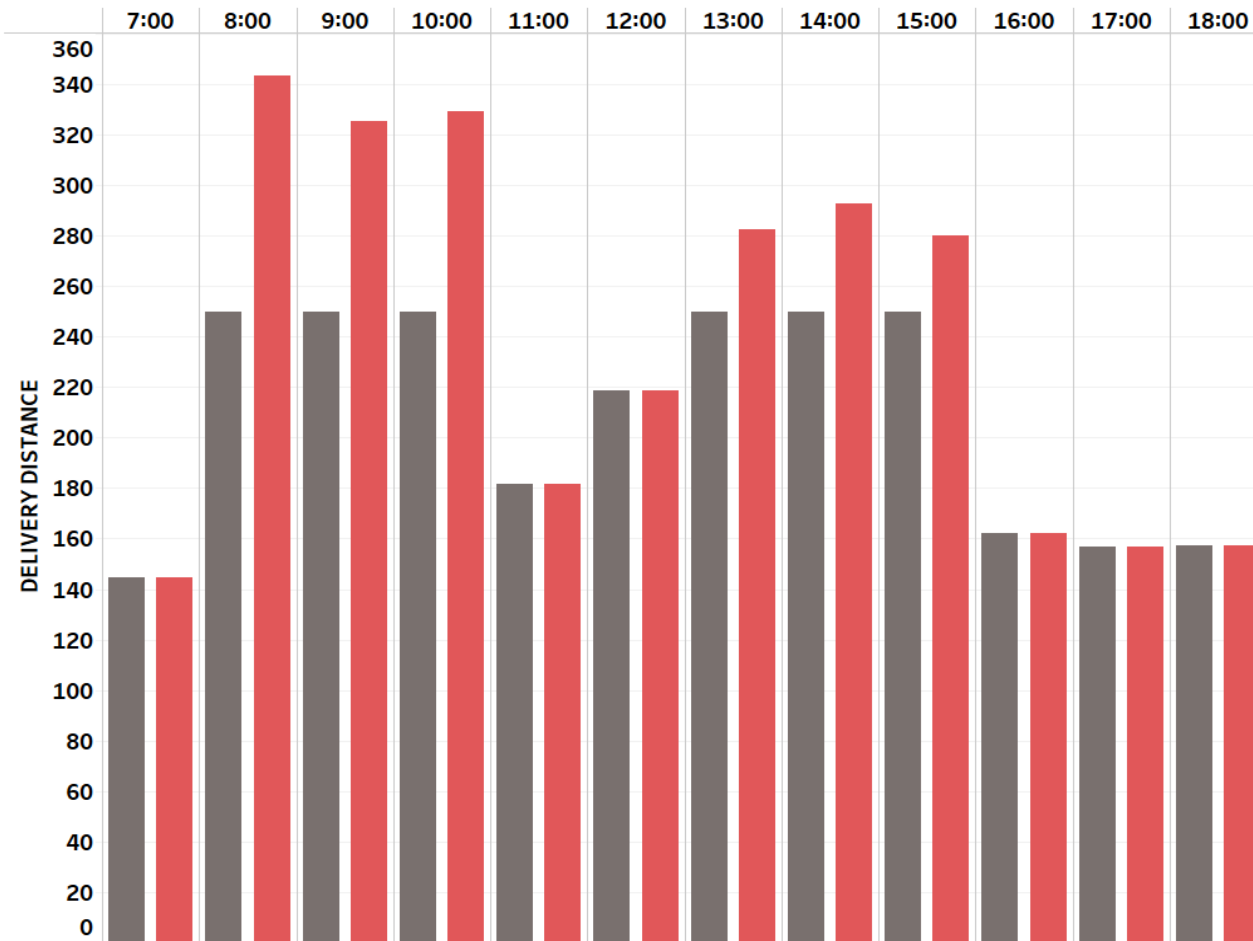


Total Daily Cost: €1,512.75



Couriers per Day: 101

The daily courier cost has been minimized while ensuring all deliveries within the 10-mile radius are completed on time. Though, deliveries between 8:00 to 10:00 and 13:00 to 15:00 doesn't meet customer demand.



# PRESCRIPTIVE ANALYSIS

■ Distance covered as per courier availability  
■ Delivery Distance to be covered

Datetime	Number of Courier
08-06-2019 07:00	6
08-06-2019 08:00	10
08-06-2019 09:00	10
08-06-2019 10:00	10
08-06-2019 11:00	7
08-06-2019 12:00	9
08-06-2019 13:00	10
08-06-2019 14:00	10
08-06-2019 15:00	10
08-06-2019 16:00	6
08-06-2019 17:00	6
08-06-2019 18:00	6

## Optimizing Courier Allocation to Meet Peak Demand

**Peak Demand:** Customer demand spikes between 8:00-10:00 and 13:00-15:00.

**Current Allocation:** Currently, only 10 couriers are assigned.

**Recommended Adjustment:** Increase the threshold of number of couriers during the peak times mentioned above to meet customer needs effectively.

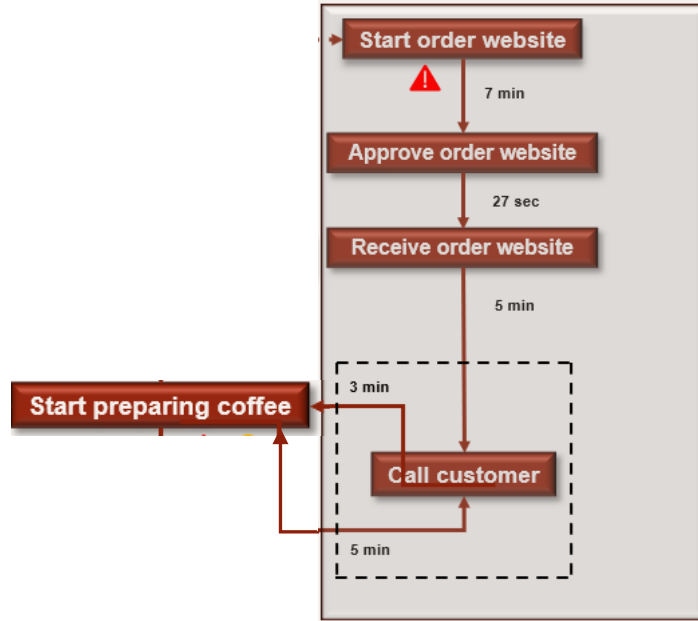
**Outcome:** Aligning courier availability with peak demand will enhance customer satisfaction and operational efficiency.



# SUMMARY

01

## Descriptive Analysis



Automate the website order verification process to streamline approvals, minimize delays, and boost efficiency

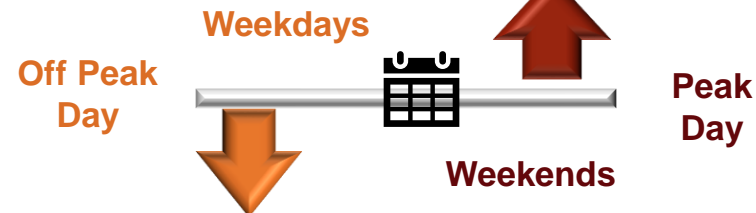
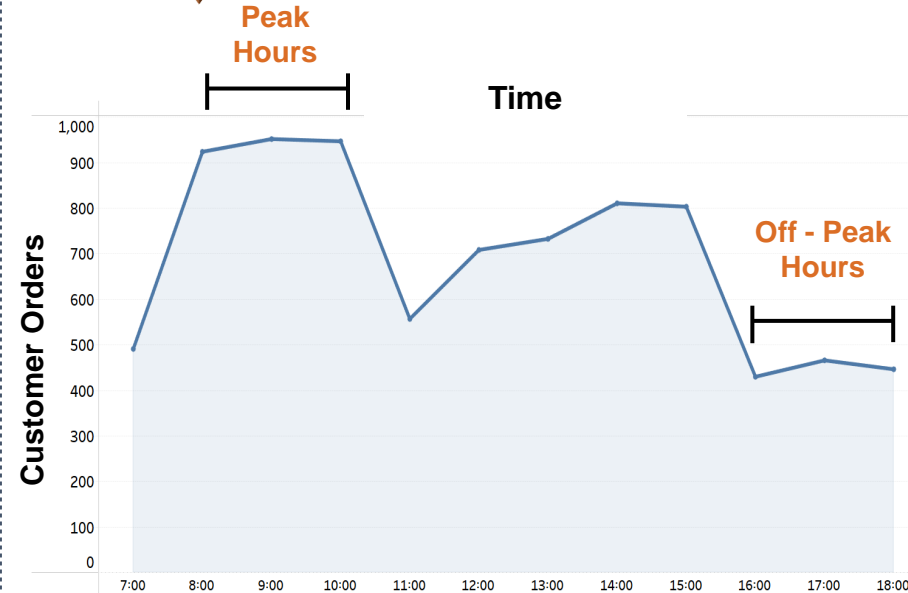


AVERAGE  
PROCESS  
THROUGHPUT  
TIME

**41 minutes**

02

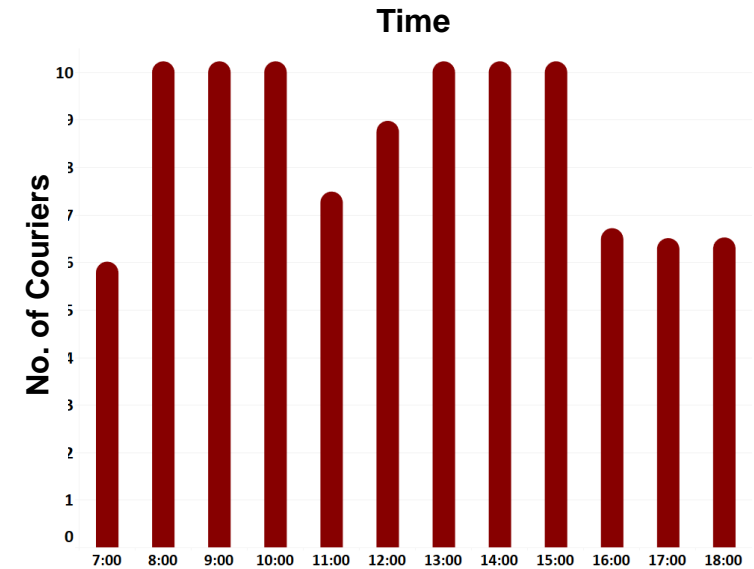
## Predictive Analysis



Optimize staffing from 8-10 AM, especially on weekends, to meet higher demand.

03

## Prescriptive Analytics



### Courier Hiring Cost Breakdown

Total Daily Cost: €1,512.75

Couriers per Day: 101



Increase couriers during peak hours (8:00 – 10:00 and 13:00 – 15:00) to optimize operations, ensuring efficient demand handling and improved customer satisfaction.