



Unlocking Breakfast Bliss

Target Audience Insights for a Coupon Campaign



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03

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Explain and describe the data

04

Coupon Targeting

Target Breakfast Cuisine enthusiasts for a coupon campaign

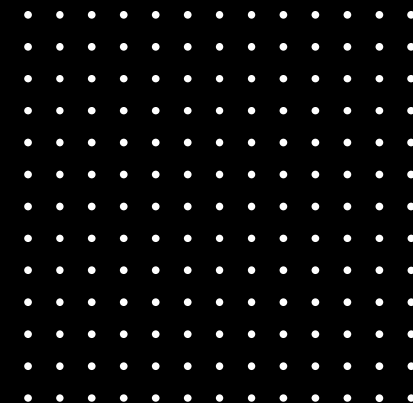




01

INTRODUCTION

Explain the goals of the
Assessment



● What are our objectives?

In this Assessment, our **goals** are:

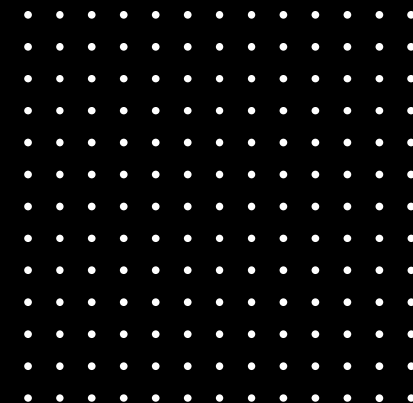
- To perform an **exploratory analysis on the customer data** and draw **conclusions** and **insights**
- To **recommend users to target in an upcoming coupon campaign** dedicated to **Breakfast cuisine**



02

DATA

Explain and describe
the data



● Our Data

Identification Information

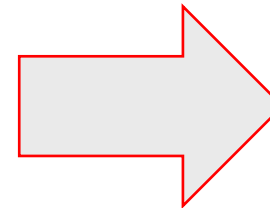
- Order id
- User id

Order Information

- City
- Vertical
- Timestamp
- Cuisine
- Etc.

Payment Information

- Paid Cash
- Amount
- Delivery cost
- Coupon Amount
- Etc.



- 5 Categorical Variables
- 5 Numerical Variables
- 2 Boolean Variables
- 1 Date Variable

● Descriptive Statistics



Total Customers

101379



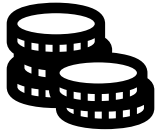
Total Orders

656209



Period

2 months



Total Revenue

6450156€



Cities

15 locations



Cuisine

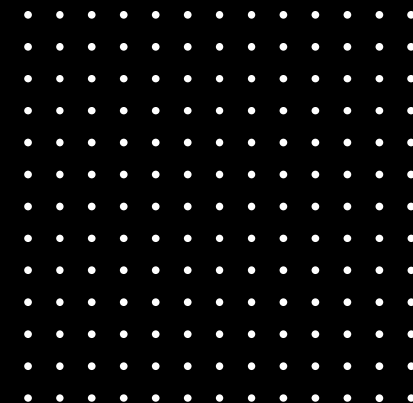
5 types



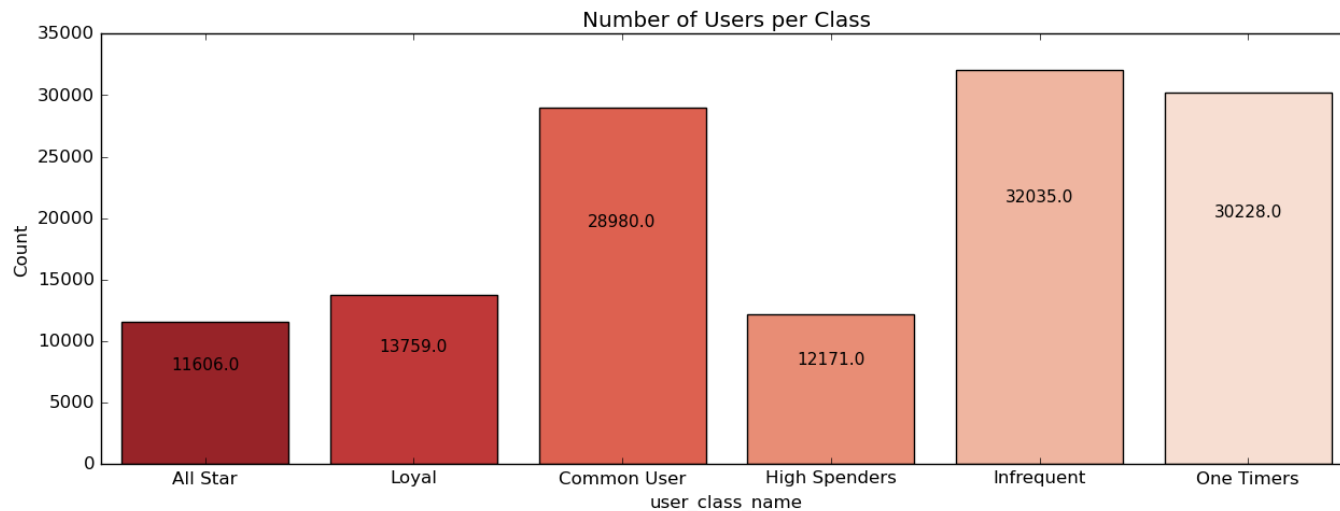
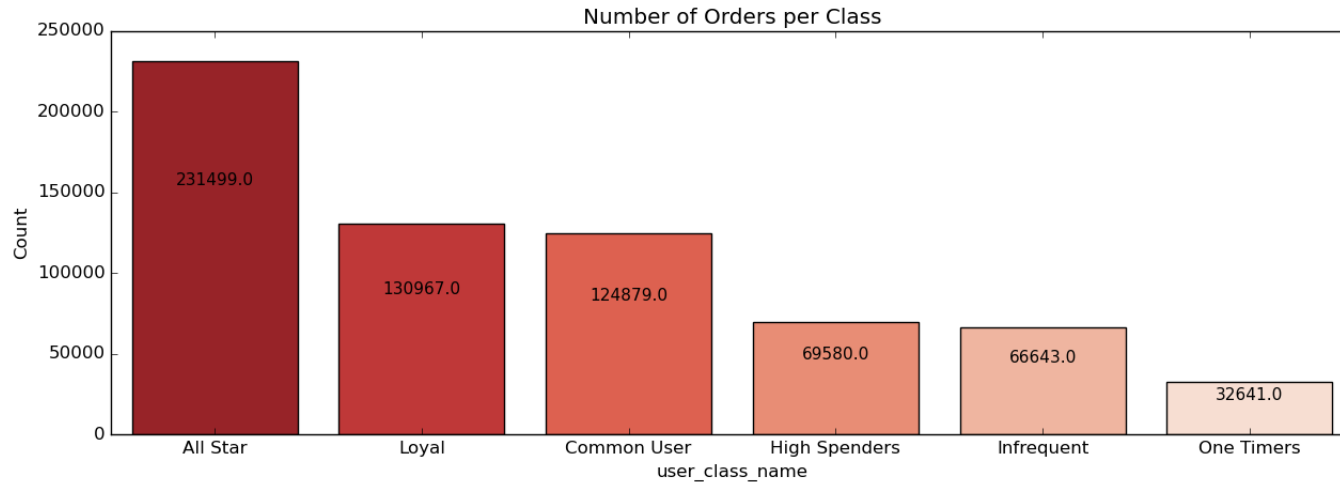
03

ANALYSIS

Exploratory Data Analysis



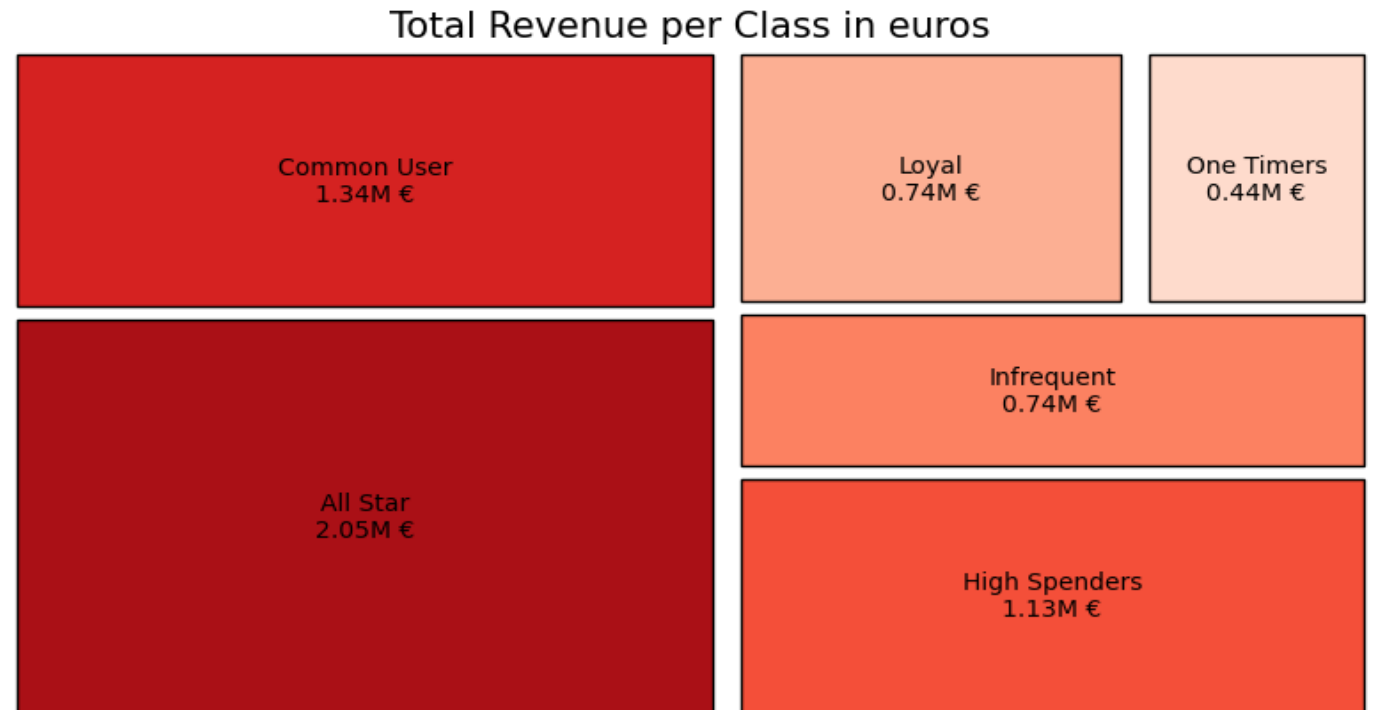
● User Demographics



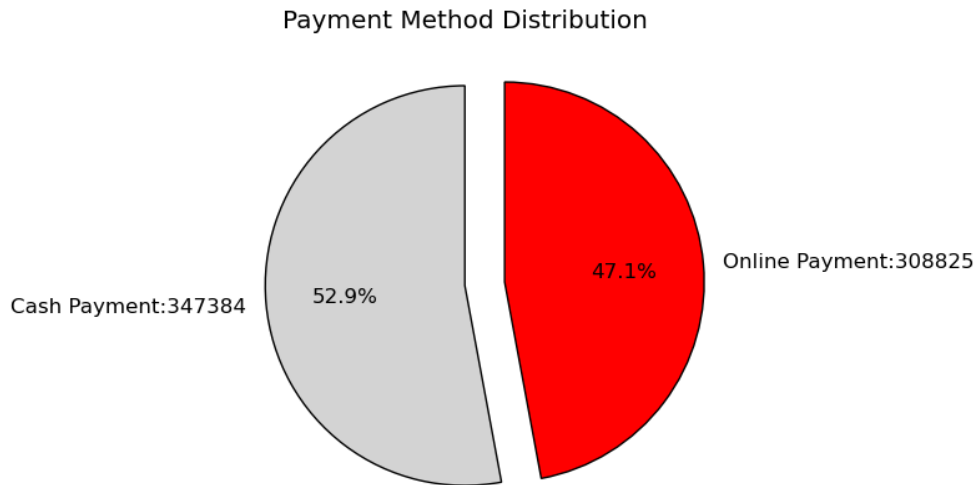
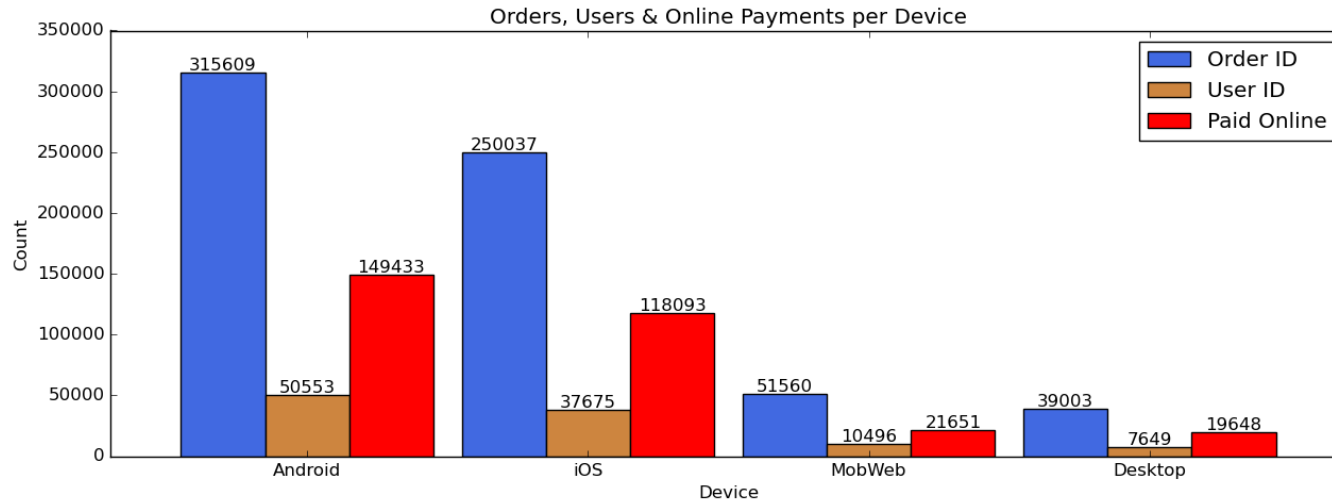
- The **All-Star** and **Loyal** categories, although representing a **smaller number of users**, contribute a **significant share of total orders**
- **Common User**, while **more numerous**, still make a **substantial number of orders**
- **High Spenders** represent users who make **fewer orders** but with **higher average order values**
- The **Infrequent** and **One Timers** categories make **fewer orders** but represent the **largest** classes regarding number of **users**

● User Demographics

- **All Star** is our top-tier customers with the **highest revenue contribution**, high engagement, and **frequent high-value orders**
- The **Loyal class**, despite having a significant number of orders, generates **little revenue like** that of the **Infrequent class**, which only has **half the number of orders**.
- Although **High spenders** belong to the last three categories in terms of orders, they **contribute a significant amount of total revenues**

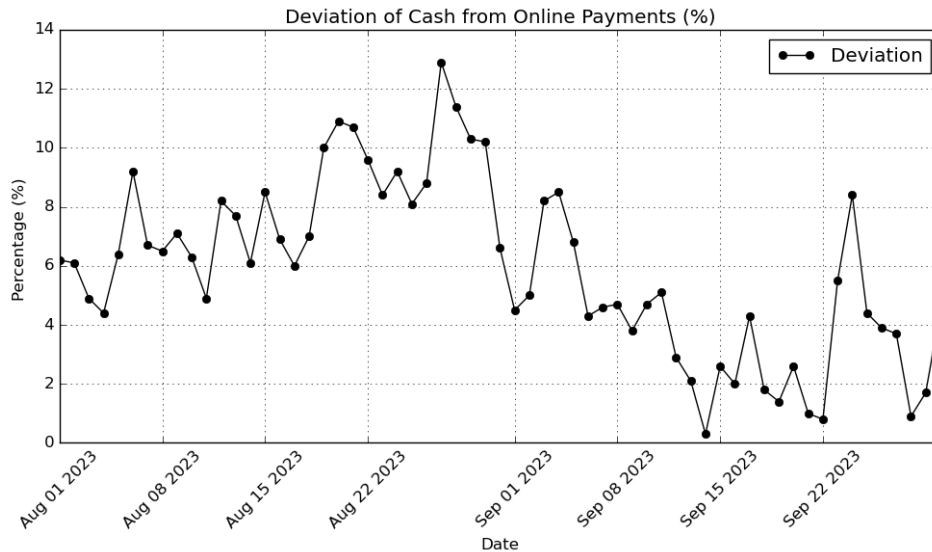
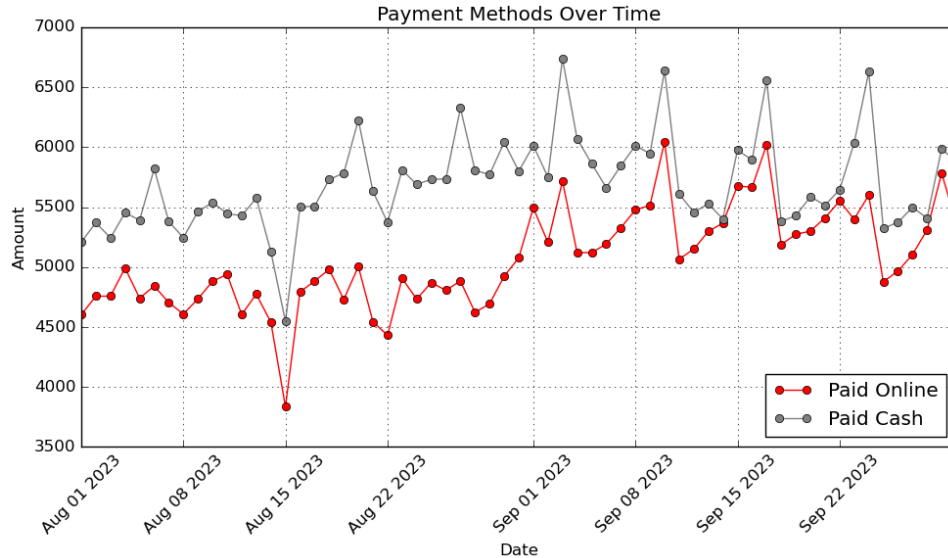


● User Behavior



- **Android** has the **highest number** of **orders** and **users** among the listed devices, indicating it as the **most popular choice for customers**
- **iOS** follows closely behind in terms of **orders** and **users**
- In general **users prefer to pay with Cash**
- Let's see if this is a **constant phenomenon** through the days or if there is a **trend of change**

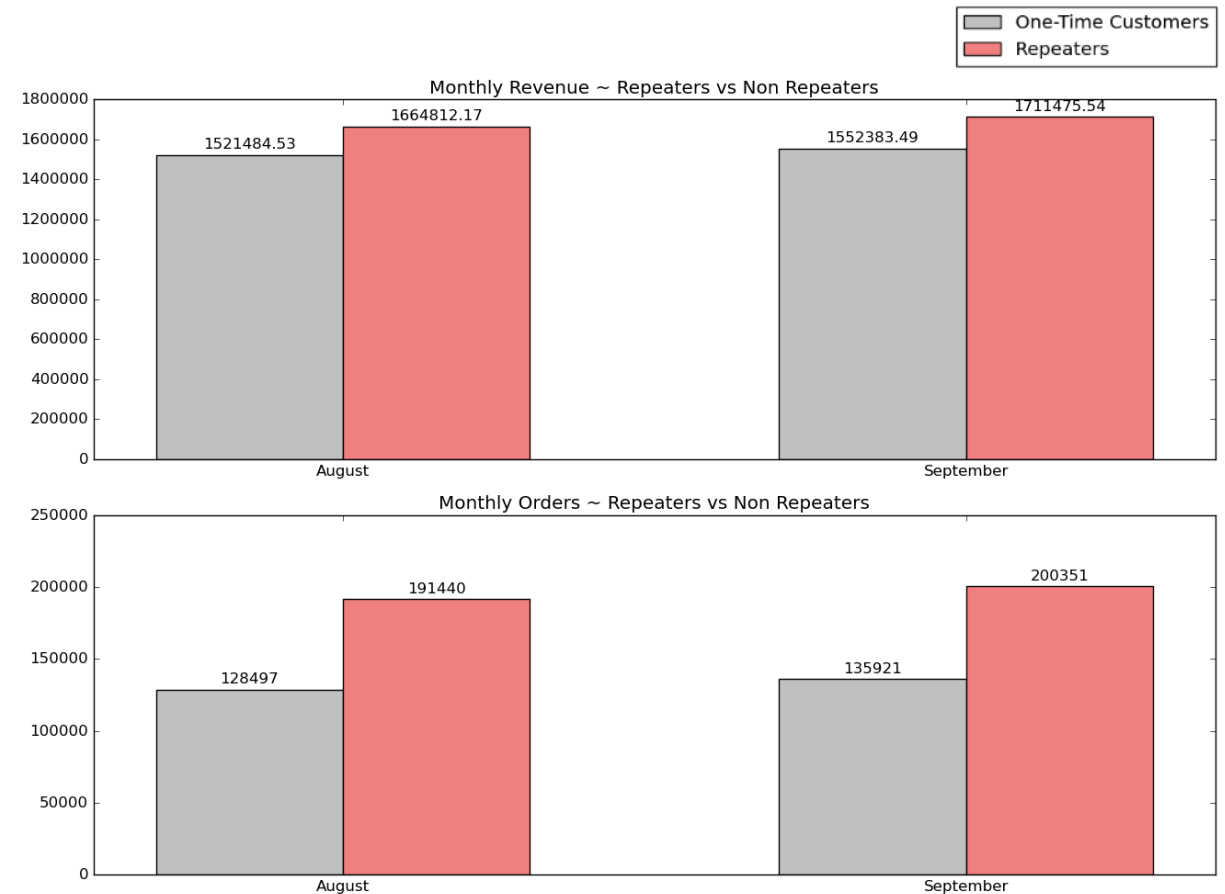
● User Behavior



- There is a **trend** showing that there is a **preference for Online Payments** in the **first half of the month**
- **Possible reasons** could be the **convenience of online payment** methods, such as credit cards or digital wallets, or perhaps the **timing coincides with the receipt of paychecks**, making online payments more feasible
- **Then**, there is a **shift towards cash payments** in the **later half of the month**
- This change might be **associated with** factors like **users** who **running low on funds** in their bank and **opting for cash payments** or some may prefer **cash transactions for specific expense**

● User Retention & Engagement

- Understanding the bar plots besides, both in August and September, **repeaters generated consistently higher revenue and placed more orders than One-Time customers**
- Thus, in order the company to **maximize revenue and engagement**, it is advisable to **focus on retaining** and nurturing **existing customers** (repeaters) **since they not only generate higher revenue but also place more orders**
- The monthly **Customer Retention Rate is 63.2 %** which means that the **36.8 % tend to churn**



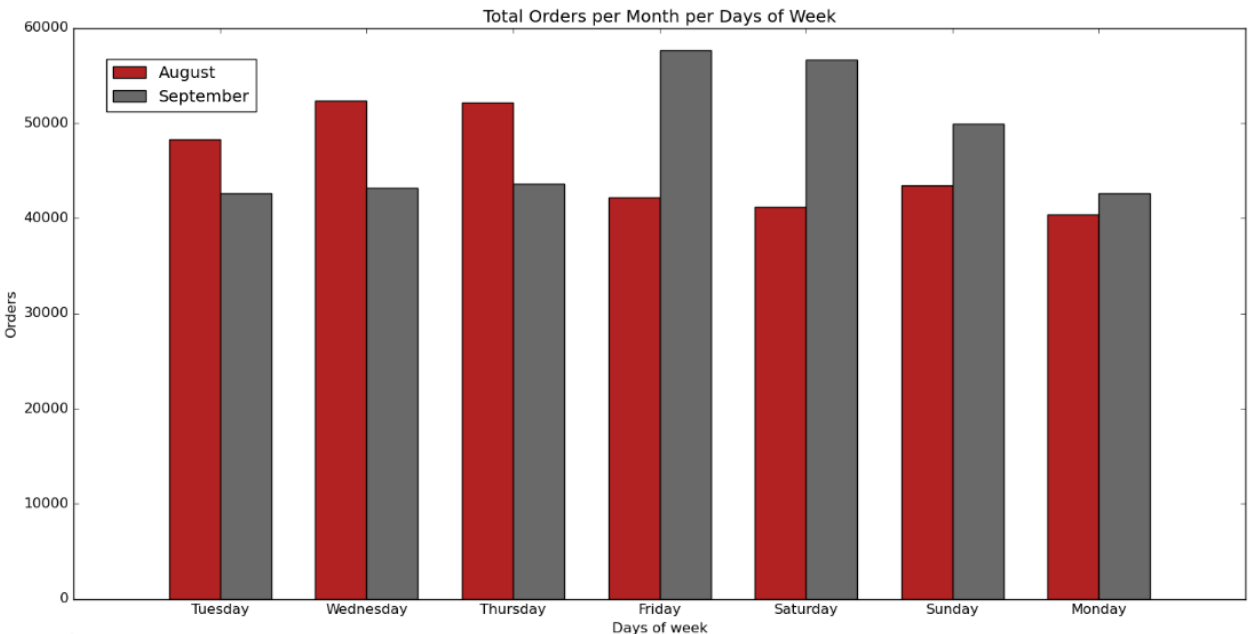
● Order Trends

Monthly

Month	Orders
August	319937
September	336272

- August and September show **different monthly order patterns**, with **September having a higher number of orders** compared to August
- This difference could be **due** to various factors, such as **seasonal variations** or **changes in customer behavior**

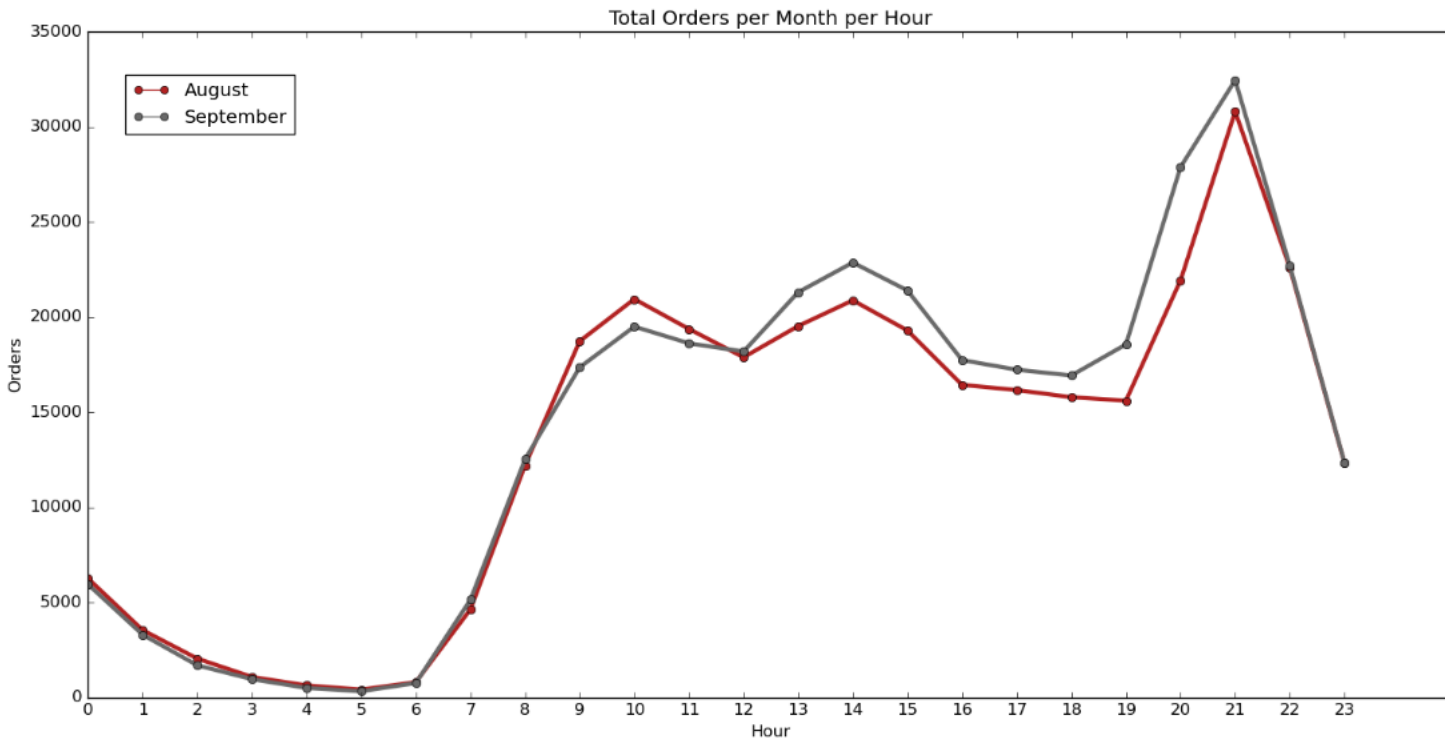
Weekly



- In weekly level, **Friday and Saturday** have the **highest order volumes**, particularly in September
- Also, from **Tuesday to Thursday**, **August is higher than September** while in **Friday-Monday**, customers **order more in September**

● Order Trends

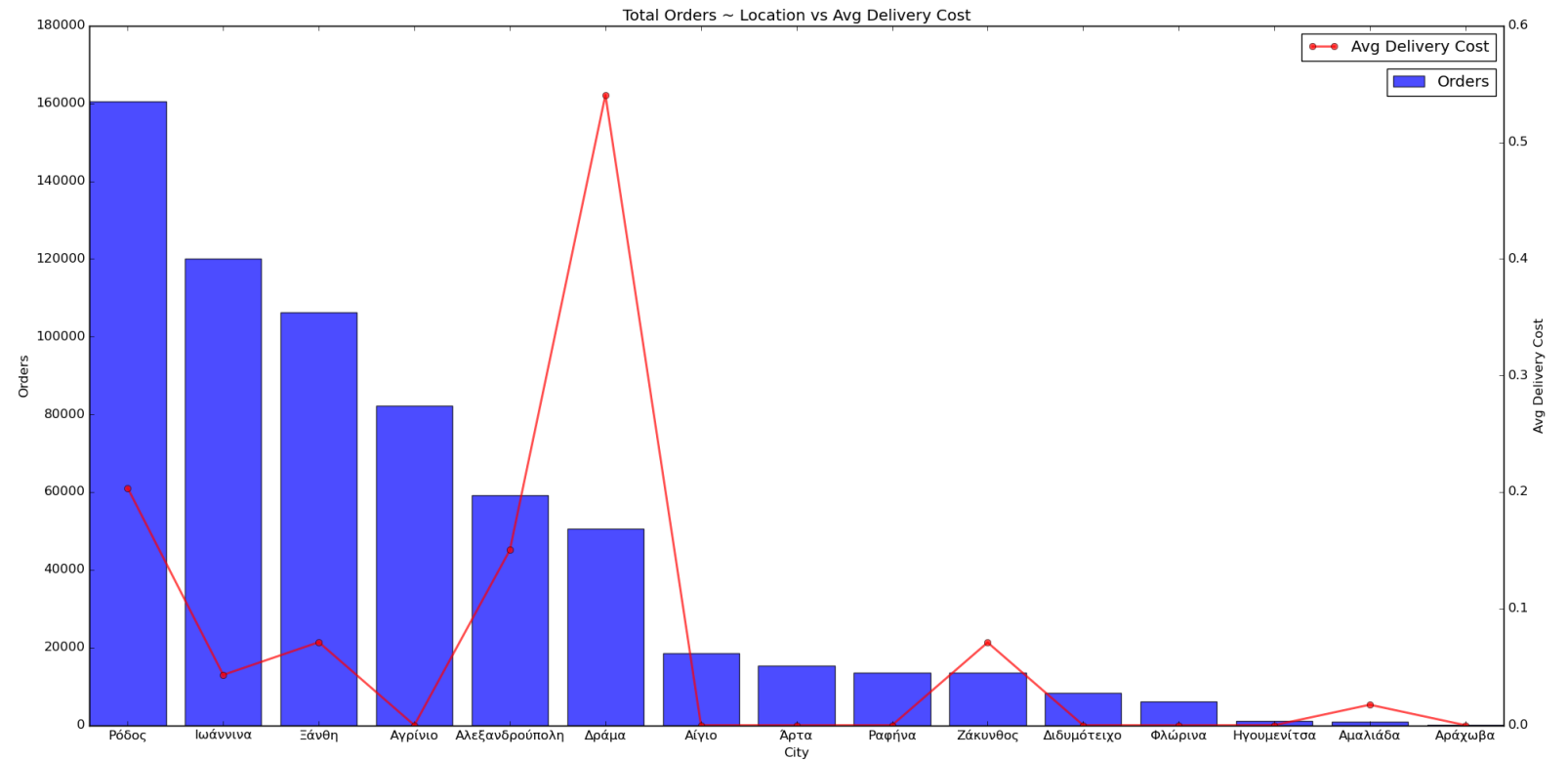
Hourly



- **Peak order times differ**, with **August** showing a **peak in the evening**, and **September** showing a **more balanced distribution** with **higher order volumes** throughout the day
- Understanding these hourly patterns can inform **resource allocation** and **delivery scheduling**

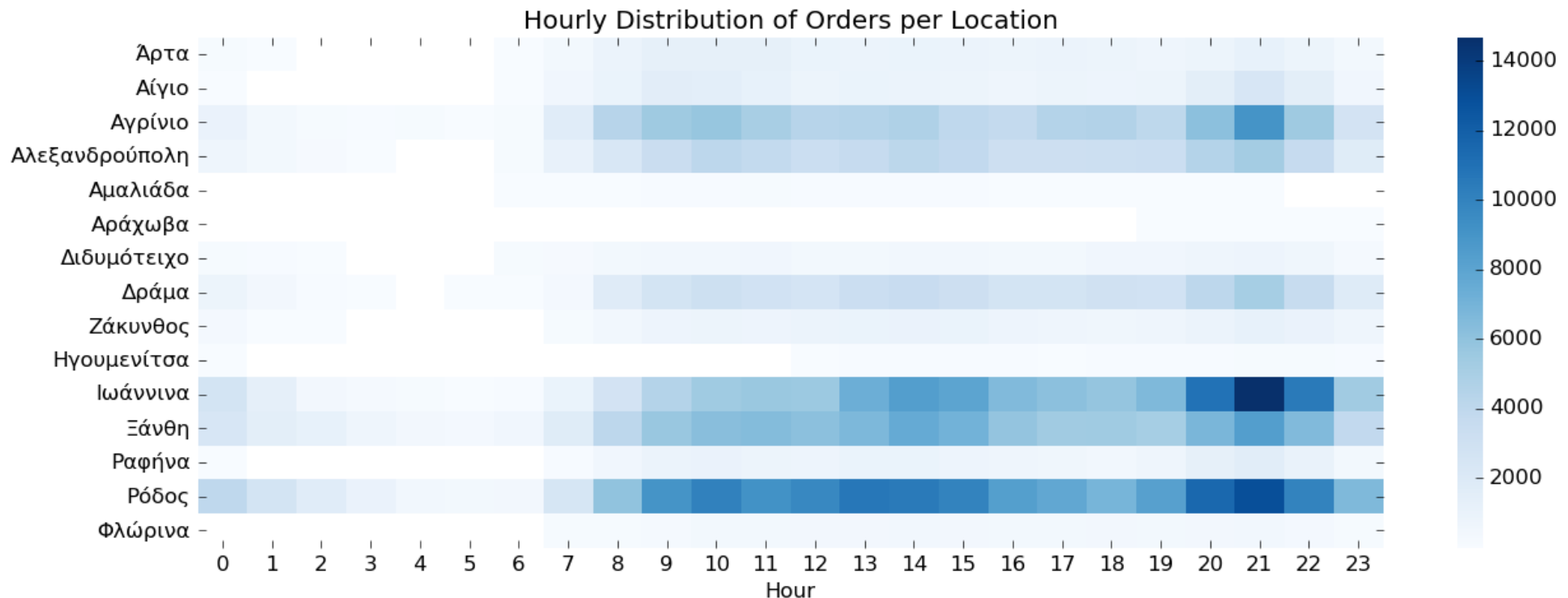
● Location Analysis

- Remarkably, cities like Rodos, Ioannina, and Xanthi have relatively **high order counts**
- Alexandroupoli and Drama, stand out with **higher avg delivery costs**
- Cities such as Agrinio, Aigio, Arta etc. **have low order counts** and **zero delivery costs**
- This may indicate **potential areas** for **cost optimization** or **increased customer engagement**



● Location Analysis

- In hourly level, is observed a **consistent hourly pattern** across all cities, with peak order activity occurring **between 12 pm to 3 pm** and **from 8 pm to 11 pm**



● Promotions and Discounts

	Having Coupon %	Having Discount %
Total Orders	11.5 %	2.6 %
Total Users	23.8 %	8.2 %
Total Revenue	11.9 %	1.6 %

Regarding Coupons:

- Approximately 11.5% of orders contain **special offers**, showing **their potential to attract more customers** and **contribute significantly to the total revenue**.

Regarding Offers:

- **Discounts are less prevalent**, with approximately 2.6% of orders having them, **resulting in a smaller revenue contribution**, suggesting the need for an improved strategy for more effective discount implementation.

● Revenue Analysis

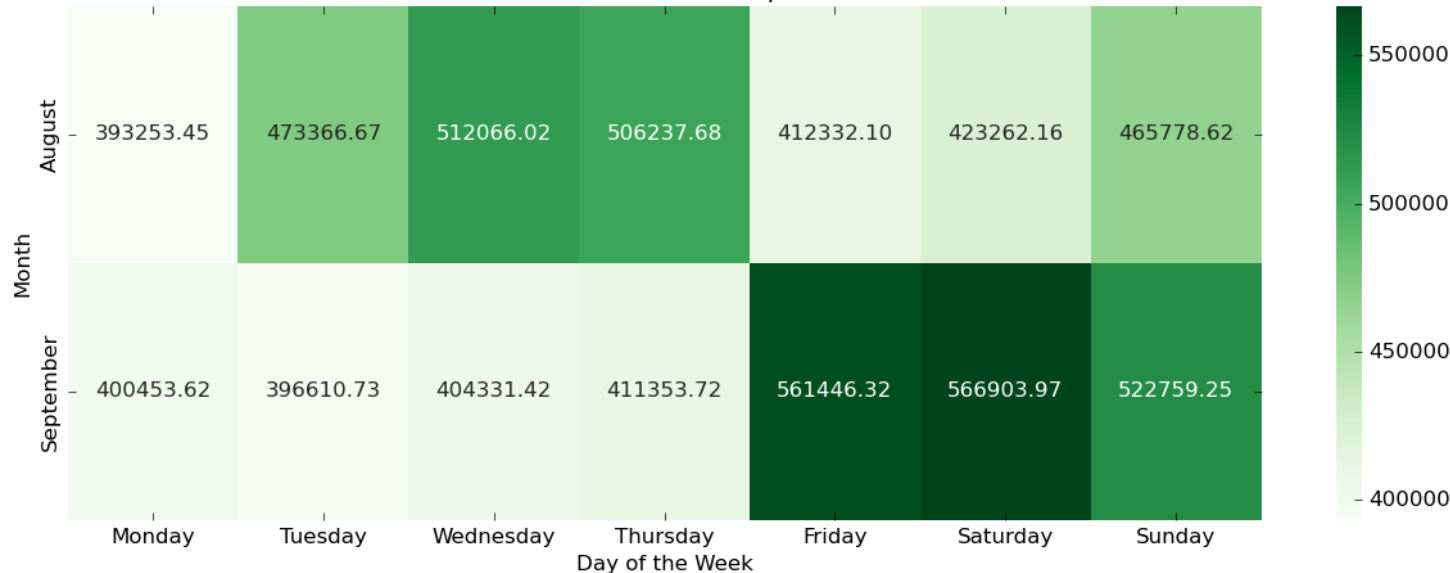
Monthly

Month	Revenue
August	3186297
September	3263859

- August and September show **different monthly revenue patterns**, with **September having a higher revenue** compared to August
- The **weekly revenue** data for August and September **shows fluctuations** in daily revenue across the days of the week.

Weekly

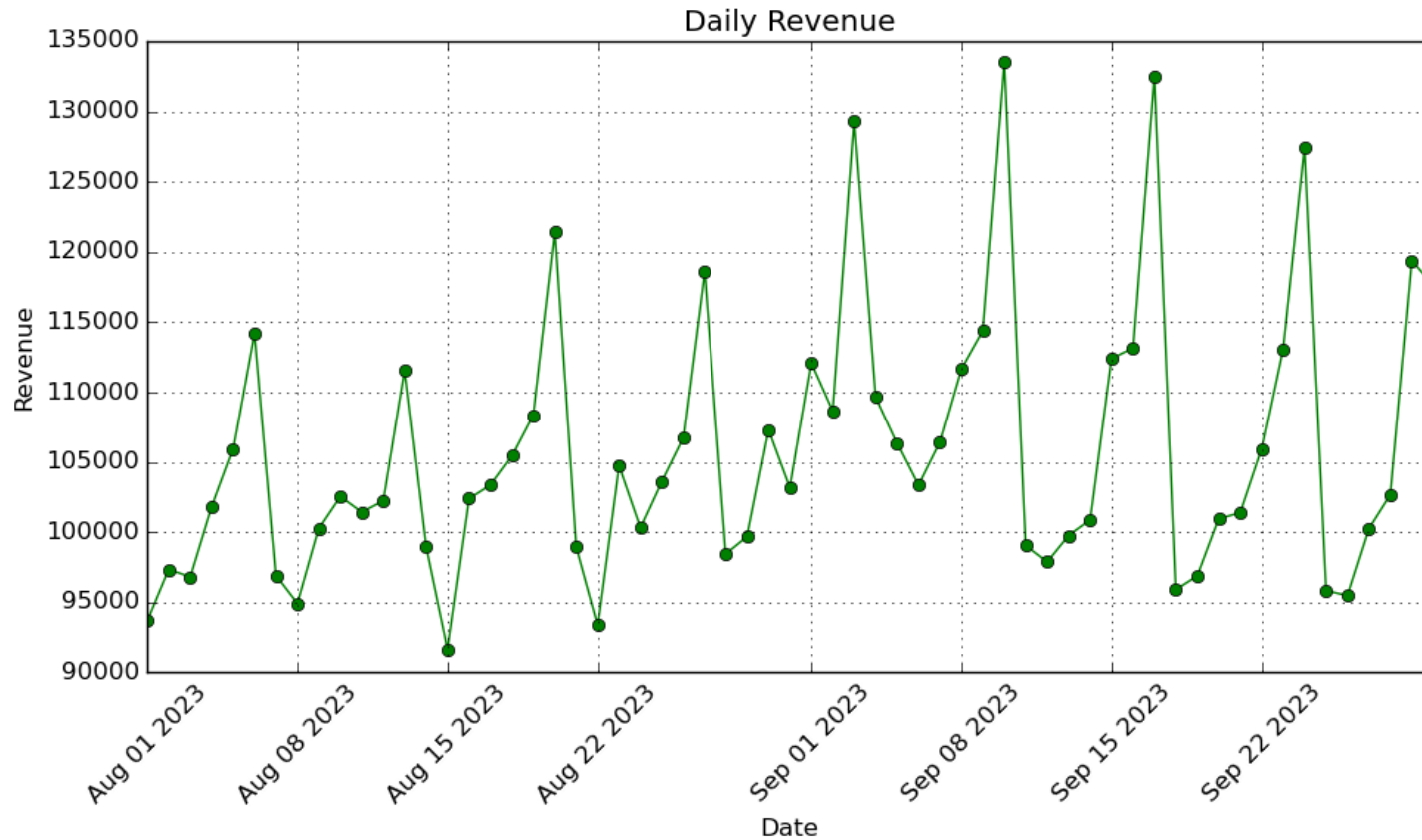
Revenue Heatmap



- Notably, in **August**, we have **peaks** from **Tuesday-Thursday** while in **September** our **peaks** are **from Friday to Sunday** which is possible due to the end of the summer holidays and the come back in workplaces

● Revenue Analysis

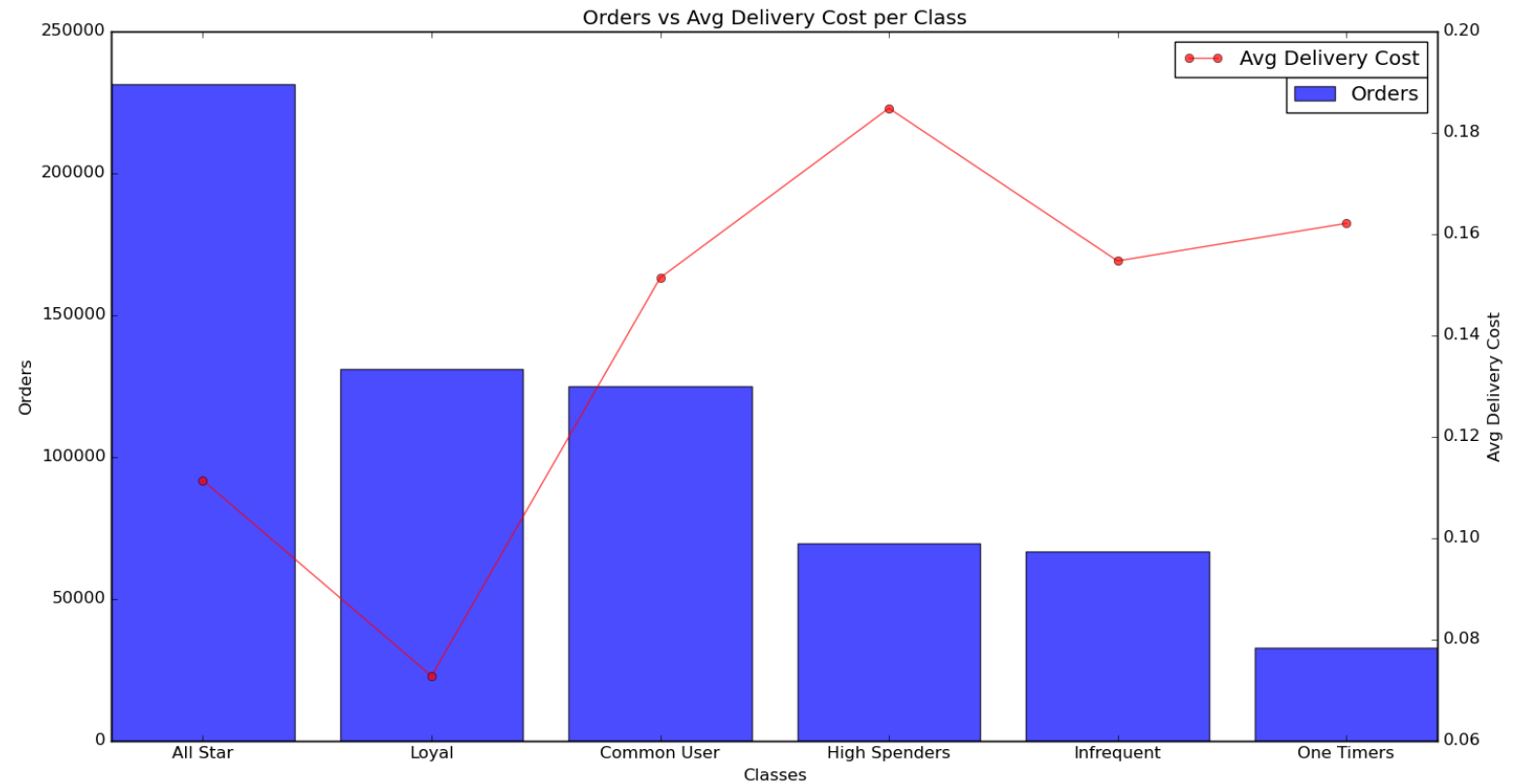
Daily



- As previously mentioned, we can observe a **weekly trend**, which exhibits variations between the two months
- The revenue data for August and September shows a **consistent upward trend in daily revenue**, with occasional **fluctuations**
- **Revenue gradually increased from August to September**, possibly indicating increased sales, promotions, or customer engagement

● Delivery Costs

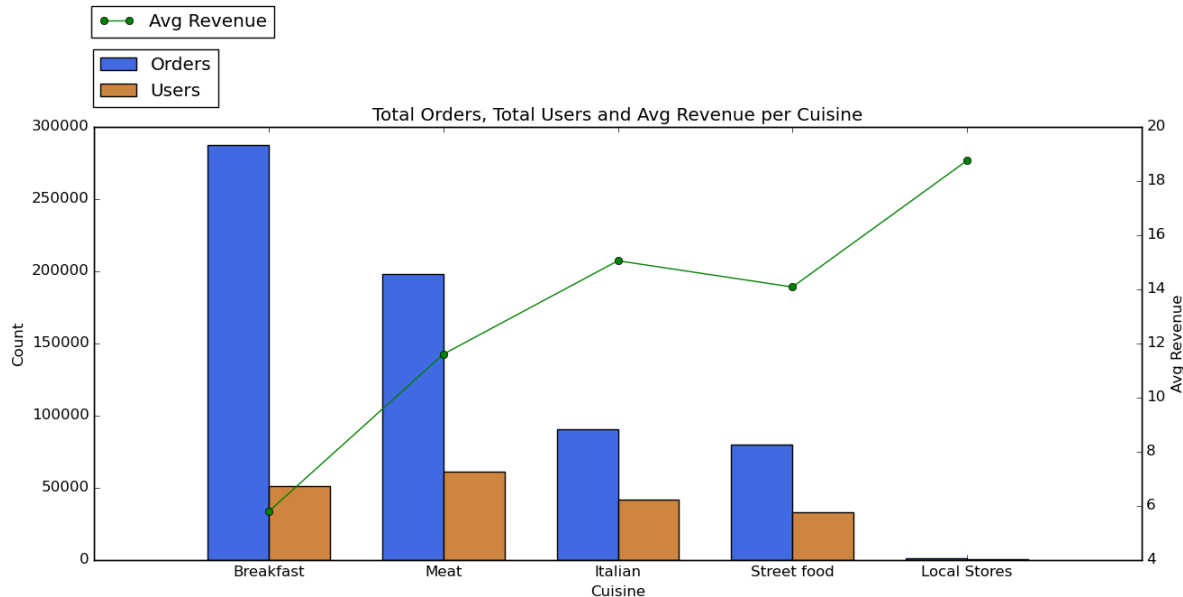
- User **classes with the highest order volumes**, such as All Star, Loyal, and Common users, tend to **have the lowest average delivery costs**
- On the other hand, **user classes with fewer total orders** typically exhibit **higher average delivery costs**
- These findings suggest opportunities for potential **cost optimization** or **targeted offers**



● Vertical and Cuisine Preferences

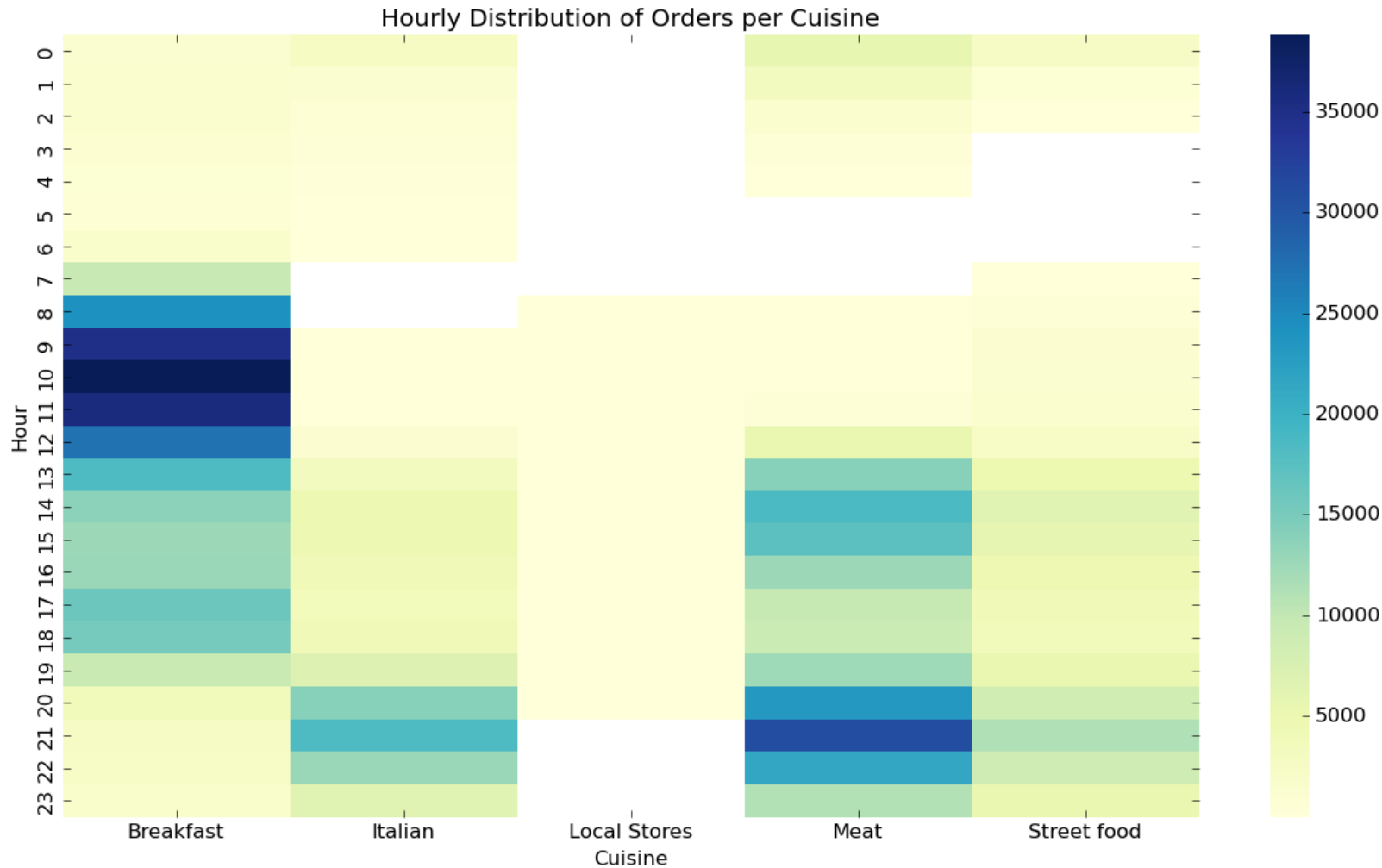
	Total Orders	Avg Revenue
Restaurants	655443	9.8 €
Local Stores	766	18.7 €

- **Orders** originating from **Local Stores** tend to have a **higher average delivery cost** compared to orders from Restaurants
- Thus, **users select Restaurants more** than Local Shops probably **due to the more extensive menu** and **higher volume of customers**, while maintaining a **lower average delivery cost**

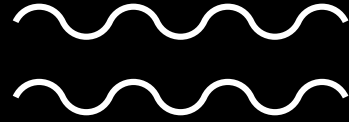


- The **more affordable the cuisine**, the **greater the appeal** to both **orders** and **users**.

● Vertical and Cuisine Preferences



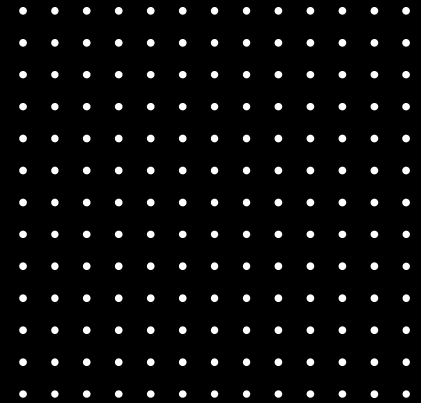
- From the heatmap besides, we can see that the **peak times** for **breakfast** are in the **morning**, for **meat** from **midday onwards with a peak at evening hours** and for **Italian & street food**, mainly during the **evening hours**



04

COUPON TARGETING

Target Breakfast Cuisine enthusiasts
for a coupon campaign



● How to target Breakfast cuisine enthusiasts?

- Our goal is to **identify and engage breakfast cuisine enthusiasts** for an upcoming coupon campaign.
- For that purpose, we have created **three user segments** to focus on:
 1. **Frequent Breakfast Customers:**
 - ❖ Users who have a history of placing breakfast **orders at least 15 times per month** (regularly)
 2. **High Breakfast Spending Users:**
 - ❖ Users who **spend at least 25 euros per month** on breakfast orders
 3. **Recent Breakfast Orders:**
 - ❖ Users who have **placed breakfast orders in the last week**, as they may be more inclined to order breakfast
- We will proceed by **analyzing the segments**

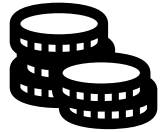
● Descriptive Statistics ~ Breakfast Cuisine



Total Customers

51067

(50% of total)



Total Revenue

1661442€

(44% of total)



Total Orders

287474

(26% of total)



Cities

13 locations



Period

2 months

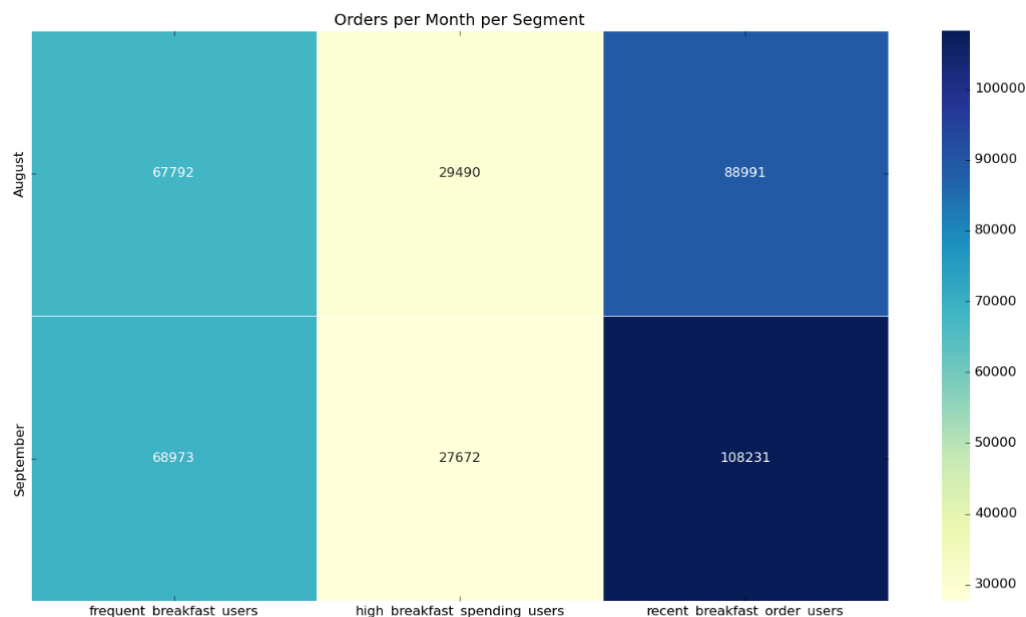


Cuisine

1 types



Order Frequency

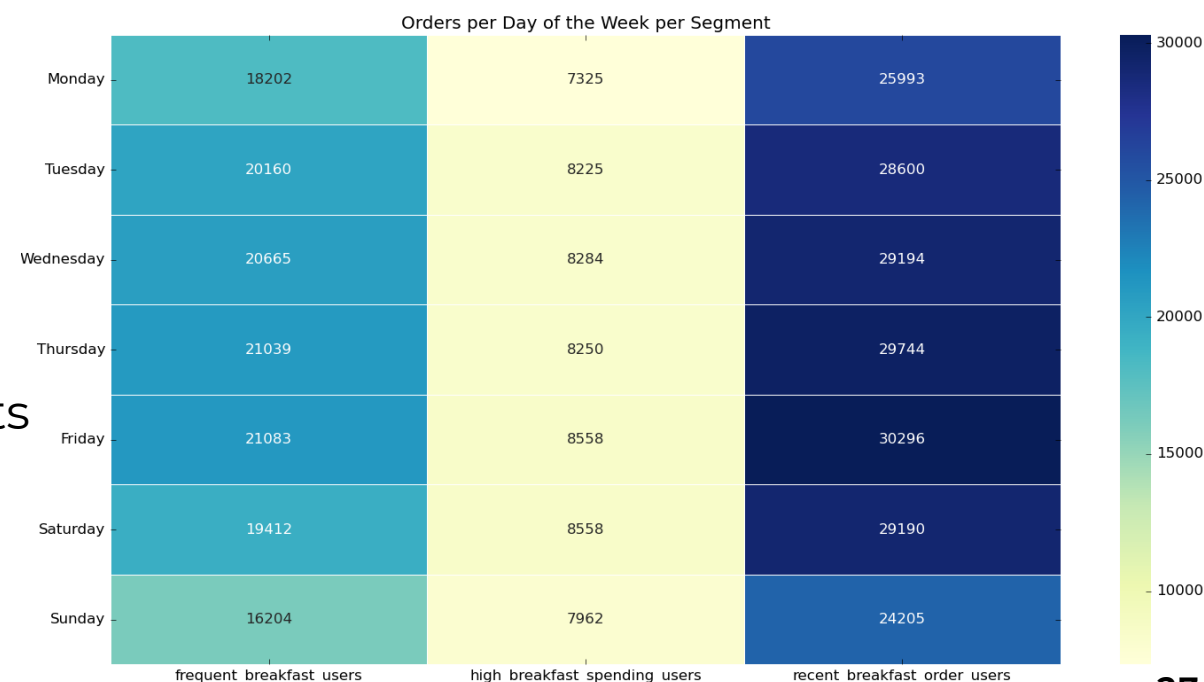


Weekly

- **Monday-Sunday, exhibit lower activity** compared to weekdays for all 3 segments
- The **highest user activity occurs on Thursdays and Fridays**, with the most recent breakfast order users on Fridays

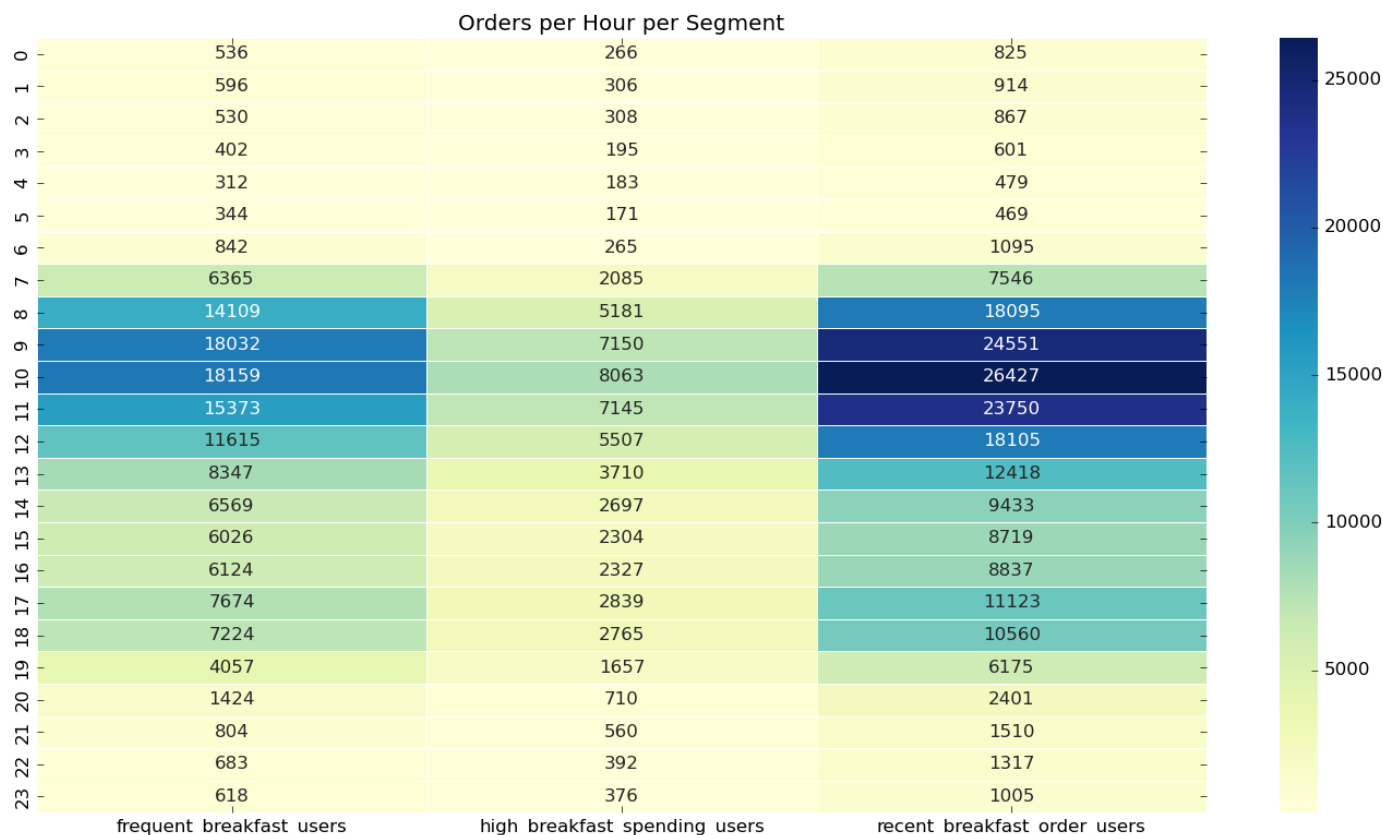
Monthly

- **Frequent breakfast users** steadily **increased from August to September**, indicating a growing user base
- **High breakfast spending users** decreased between **two months**
- **Recent breakfast order users** showed a significant **increase in September**, suggesting increased user activity and engagement





Order Frequency



Hourly

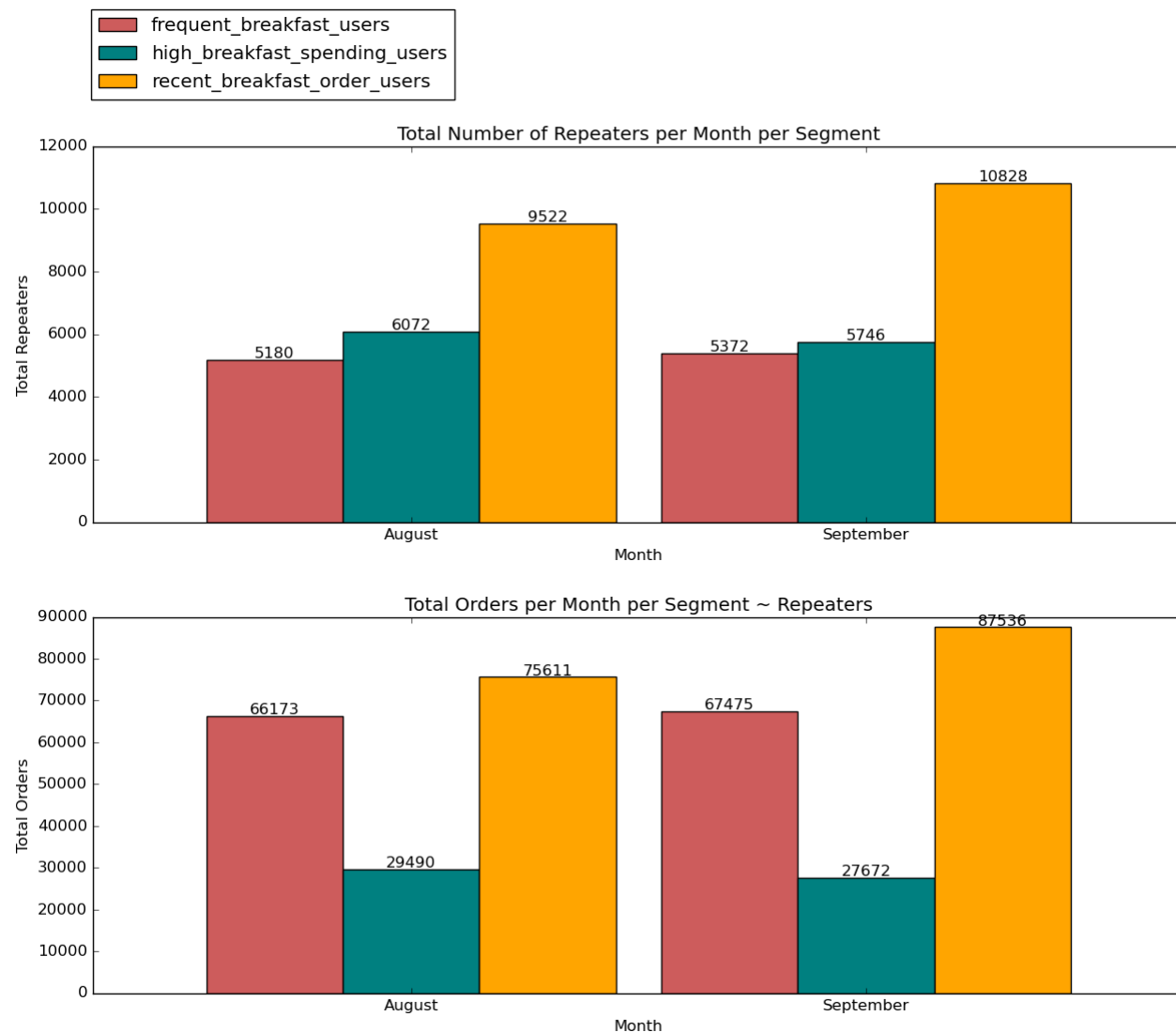
- **Frequent Breakfast Users** and **High Breakfast Spending Users** show **similar trends** during the morning hours, **7 AM to 12 AM**, having the **highest user activity from 9 AM to 11 AM**
- Also, **High Breakfast Spending Users** have **relatively consistent activity levels throughout the day**, suggesting that they may be a **more reliable customer segment** throughout the day
- **Recent Breakfast Order Users** exhibit a preference for **ordering breakfast slightly later in the morning** compared to the other two segments.

● Average Order Spendings

	Avg Revenue Frequent Breakfast Users	Avg Revenue High Breakfast Spending Users	Avg Revenue Recent Breakfast Order Users
August	5.12 €	7.72 €	5.52 €
September	4.99 €	7.41 €	5.45 €

- **High Breakfast Spending Users** consistently achieve the **highest average revenue** per user in both months, with the **other two segments** displaying **similar, closely** competitive results.
- Moreover, this segment **might represent high-value** or **premium users** who contribute significantly to revenue.

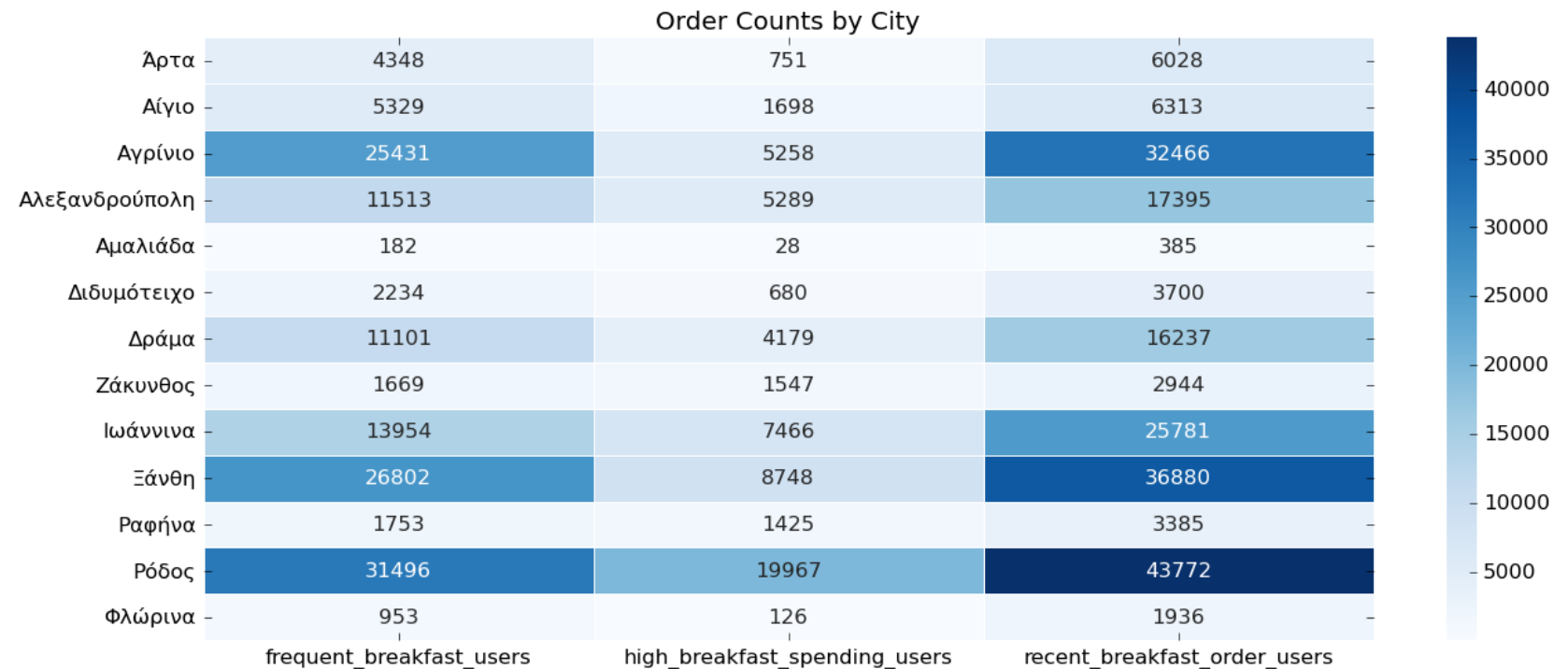
● Segments vs Repeaters



- The **total number of repeaters** in each segment **varies** between the two months
- **Frequent Breakfast Users** and **Recent Breakfast Order Users** showed an **increase**, while **High Breakfast Spending Users** showed a **decrease**
- The **Orders** of repeaters coming from **High Breakfast Spending Users** **decreased**, while those coming from **Frequent Breakfast Users** and **Recent Breakfast Order Users** **increased** from August to September

● Segments per Location

- **Rhodes, Xanthi** and **Agrinio** are the **top 3 locations** in terms of **orders for all three segments**, while **Amaliada, Florina** and **Didymoteicho** are in the **bottom 3** locations.
- It is likely that **Rhodes** is **susceptible due to the high summer season**, so we will have to see how the preference continues in the coming months



● Previous engagements with discounts or coupons

Segments	Order Using Coupon %	Order Using Discount %
Frequent Breakfast Users	12 %	4 %
High Breakfast Spending Users	9 %	3 %
Recent Breakfast Order Users	12 %	3 %

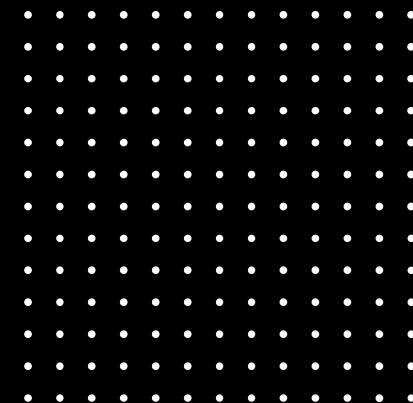
- **Frequent Breakfast Users** have the **highest percentage** of **orders using coupons** (12%) and **orders using discounts** (4%)
- **High Breakfast Spending Users** **follow closely** with 9% of orders using coupons and 3% using discounts
- **Recent Breakfast Order Users** **also exhibit a similar pattern** with 12% of orders using coupons and 3% using discounts.



05

RECOMMENDATIONS

Summary and
recommendations



● Summary

1. Frequent Breakfast Customers:

- ❖ 12 % of all the users
- ❖ Tend to **order in weekdays**, more specifically from **Tuesday to Friday**, with **peak hours 9 AM to 11 AM**
- ❖ The **average revenue** per order is quite **small**, but their **total orders** are **many** which results in a **high total revenue**
- ❖ Tend to be **affected** more **from coupons**

2. High Breakfast Spending Users:

- ❖ 15 % of all the users
- ❖ The **weekly distribution** of their orders is approximately the **same** on **all days**
- ❖ Have the **highest average revenue** per user
- ❖ **Affected** more **from coupons** than from discounts

3. Recent Breakfast Orders:

- ❖ 41 % of all the users
- ❖ Exhibit a preference for **ordering breakfast slightly later in the morning**
- ❖ The **average revenue** per order is quite **small**, but their **total orders** are **many** which results in a **high total revenue**
- ❖ Tend to be **affected** more from **coupons**

● Recommendations

General Recommendations for the Coupon campaign:

- Our campaign should **focus** more on users who **order from Rodos, Xanthi or Agrinio** due to the **huge harvest of orders**
- Additionally, the **best hours** to send the coupons is **from 8 AM to 12 AM**

Which Users to target?

- If our goal is to **increase overall breakfast consumption and orderings**, we should target the users included in **Frequent Breakfast Users** segment
- If we aim to **promote premium breakfast offerings or increase revenue**, we should target the users in **High Breakfast Spending Users** segment
- If we want to **boost users who have already shown an interest in ordering breakfast** with a broader purpose to keep their interest on, we should select users included in **Recent Breakfast Order Users** segment



T H A N K Y O U ! !

