

Unlocking Breakfast Bliss

Target Audience Insights for a Coupon Campaign



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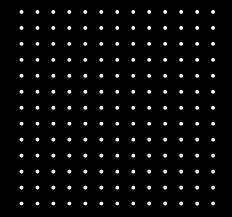




01

INTRODUCTION

Explain the goals of the Assessment



What are our objectives?

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

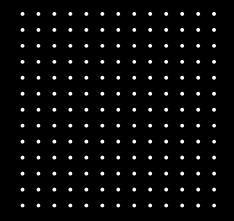
- To perform an exploratory analysis on the customer data and draw conclusions and insights
- To recommend users to target in an upcoming coupon campaign dedicated to Breakfast cuisine



02

DATA

Explain and describe the data



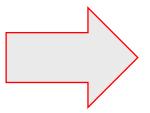
Our Data

Identification Information

- Order id
- User id

Order Information

- City
- Vertical
- Timestamp
- Cuisine
- Etc.



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

Payment Information

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

Descriptive Statistics



Total Customers

101379



Total Revenue

6450156€



Total Orders

656209



Cities

15 locations



Period

2 months



Cuisine

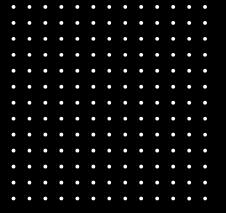
5 types



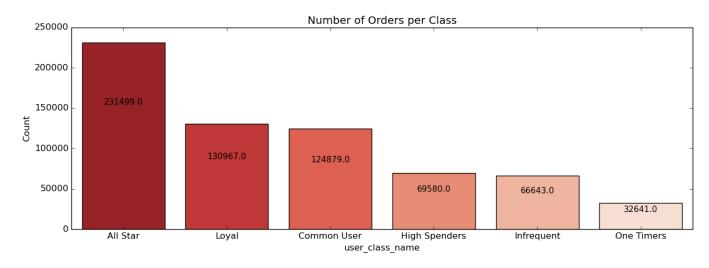
03

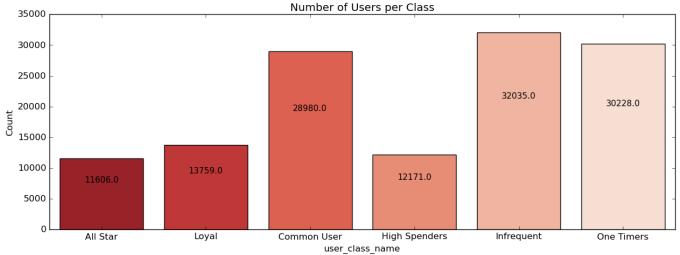
ANALYSIS

Exploratory Data Analysis



User Demographics

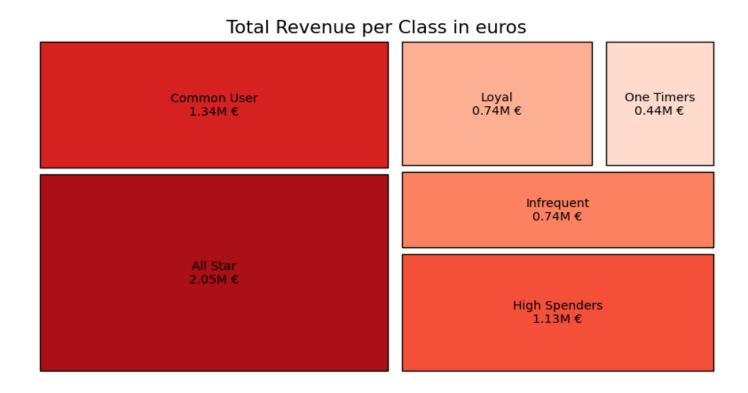




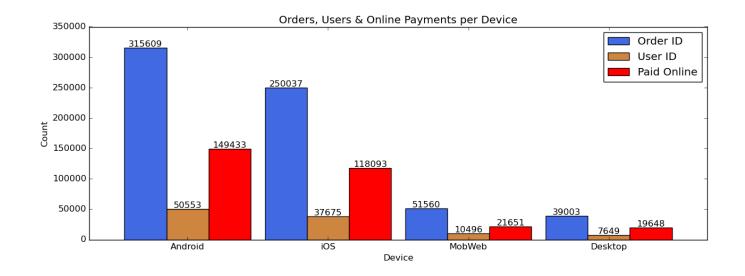
- The All-Star and Loyal categories, although representing a smaller number of users, contribute a significant share of total orders
- Common User, while more numerous, still make a substantial number of orders
- High Spenders represent users who make fewer orders but with higher average order values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

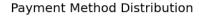
User Demographics

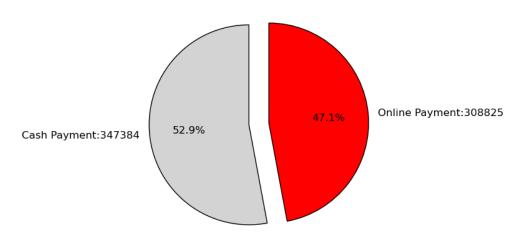
- All Star is our top-tier customers with the highest revenue contribution, high engagement, and frequent high-value orders
- The Loyal class, despite having a significant number of orders, generates little revenue like that of the Infrequent class, which only has half the number of orders.
- Although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



User Behavior

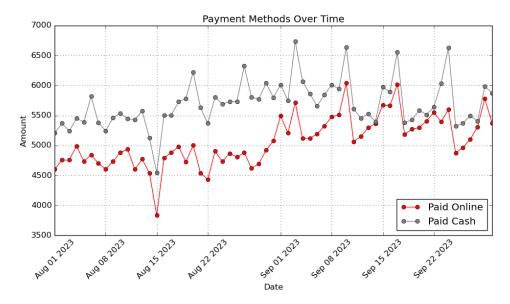


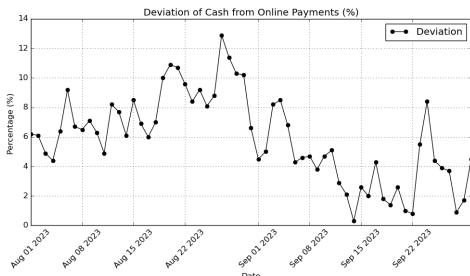




- Android has the highest number of orders and users among the listed devices, indicating it as the most popular choice for customers
- iOS follows closely behind in terms of orders and users
- In general users prefer to pay with Cash
- Let's see if this is a constant phenomenon through the days or if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

User Behavior

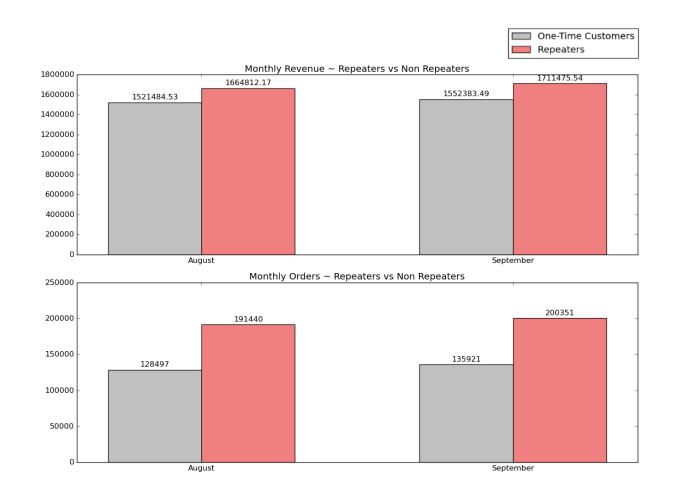




- There is a trend showing that there is a preference for Online Payments in the first half of the month
- Possible reasons could be the convenience of online payment methods, such as credit cards or digital wallets, or perhaps the timing coincides with the receipt of paychecks, making online payments 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



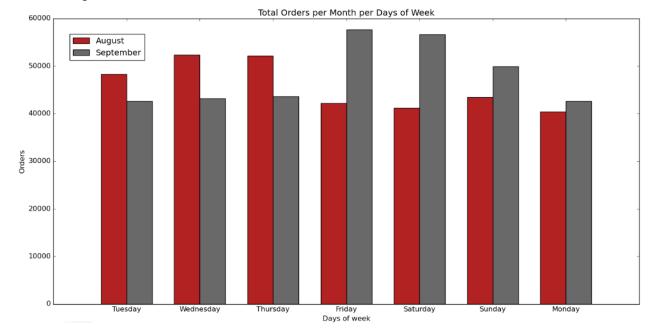
Order Trends

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

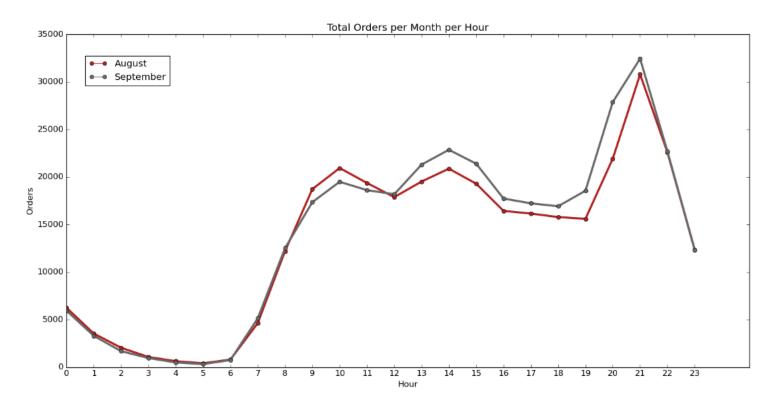
Weekly



- 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

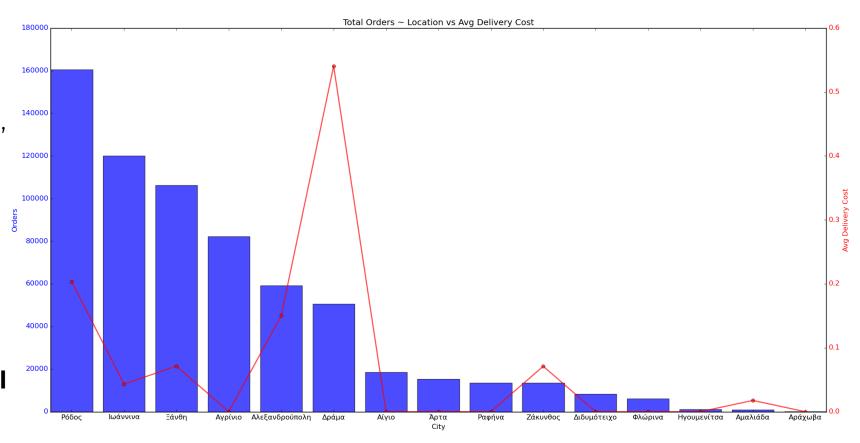
Hourly



- 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

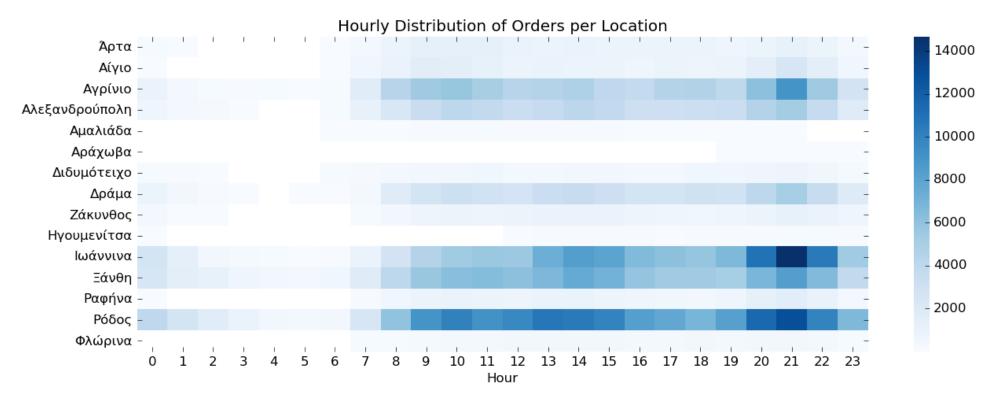
Location Analysis

- Remarkably, cities like Rodos, Ioannina, and Xanthi have relatively high order counts
- Alexandorupoli 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.

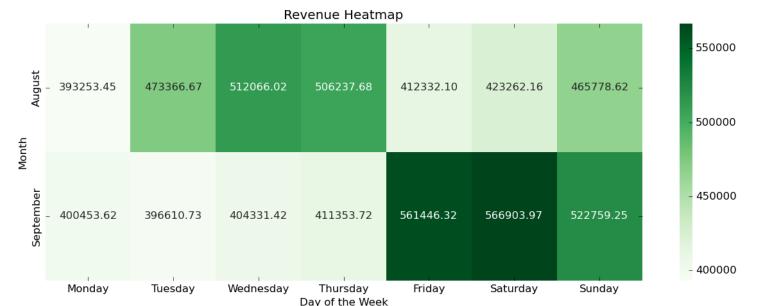
Revenue Analysis

Monthly

Month	Revenue
August	3186297
September	3263859

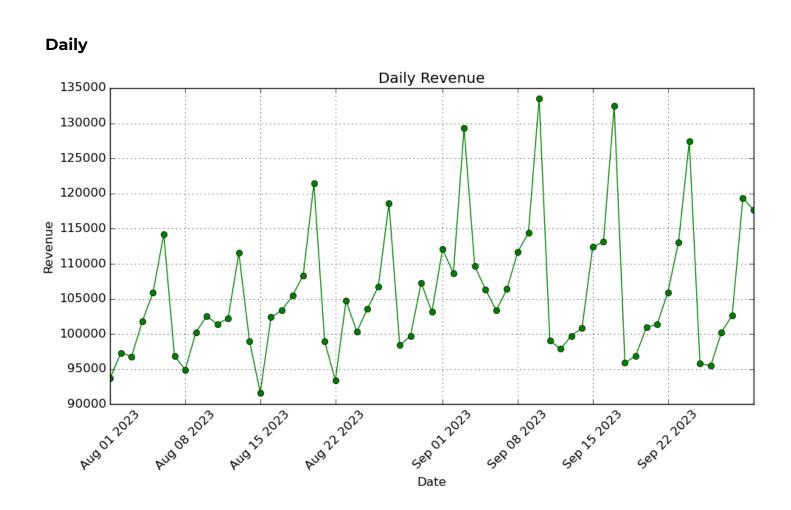
- August and September show different monthly revenue patterns, with September having a higher revenue compared to August
- The weekly revenue data for August and September shows fluctuations in daily revenue across the days of the week.

Weekly



 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

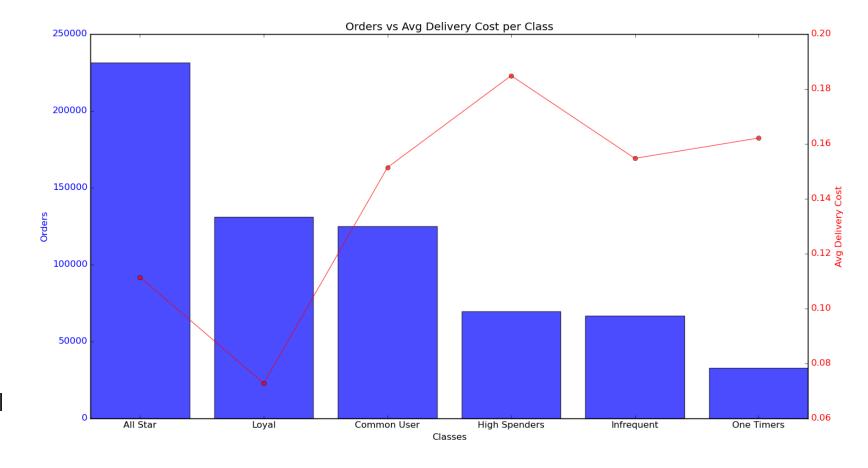
Revenue Analysis



- 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

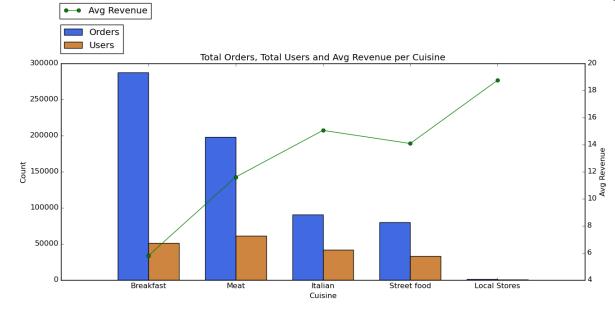
- User classes with the highest order volumes, such as All Star, Loyal, and Common users, tend to have the lowest average delivery costs
- On the other hand, user classes with fewer total orders typically exhibit higher average delivery costs
- These findings suggest opportunities for potential cost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



Vertical and Cuisine Preferences

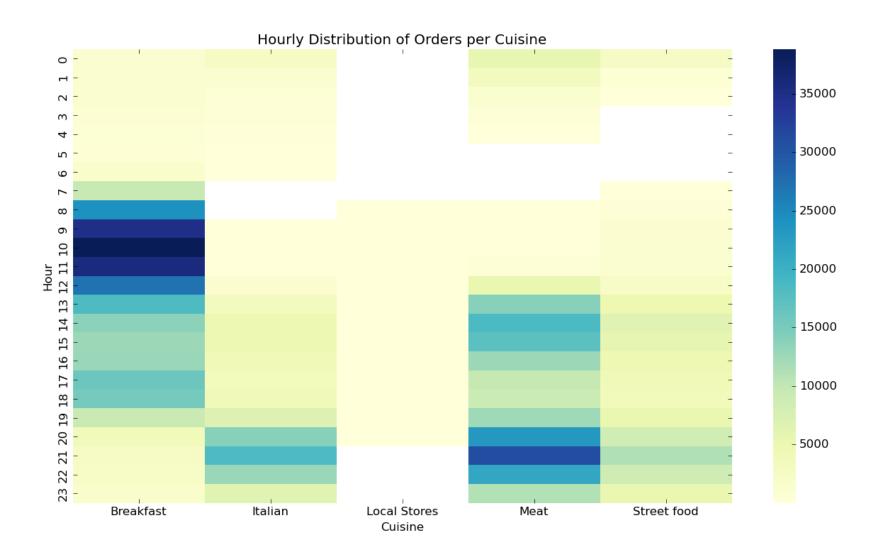
	Total Orders	Avg Revenue
Restaurants	655443	9.8€
Local Stores	766	18.7 €

- 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

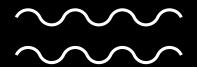


 The more affordable the cuisine, the greater the appeal to both orders and users.

Vertical and Cuisine Preferences



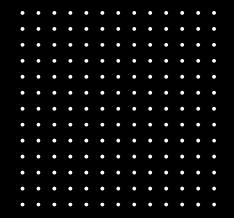
 From the heatmap besides, we can see that the peak times for breakfast are in the morning, for meat from midday onwards with a peak at evening hours and for Italian & street food, mainly during the evening hours



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

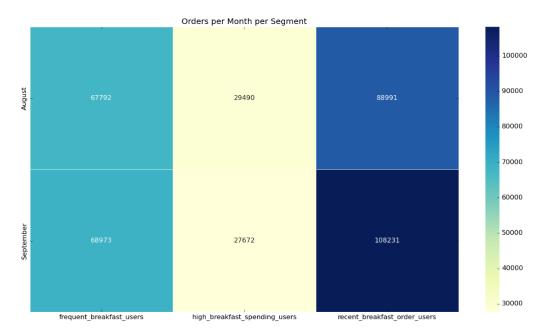
2 months



Cuisine

1 types

Order Frequency

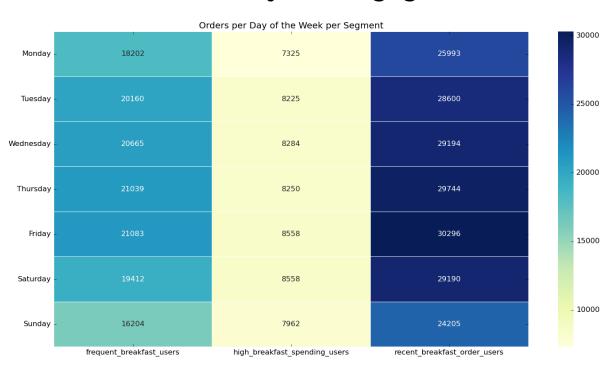


Weekly

- 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

	Orders per Hour per Segment			
0 -	536	266	825 -	
П -	596	306	914 -	
7 -	530	308	867 -	
m -	402	195	601 -	
4 -	312	183	479 -	
- 2	344	171	469 -	
9 -	842	265	1095 -	
۲ -	6365	2085	7546 -	
ω -	14109	5181	18095	
6 -	18032	7150	24551	
10	18159	8063	26427	
11	15373	7145	23750	
12	11615	5507	18105	
- 13	8347	3710	12418 -	
14	6569	2697	9433 -	
15	6026	2304	8719 -	
16	6124	2327	8837 -	
17	7674	2839	11123 -	
- 18	7224	2765	10560 -	
19	4057	1657	6175 -	
- 20	1424	710	2401 -	
21	804	560	1510 -	
- 22	683	392	1317 -	
- 23	618	376	1005 -	
	frequent_breakfast_users	high_breakfast_spending_users	recent_breakfast_order_users	

Hourly

20000

15000

10000

5000

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

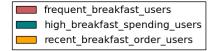
Recent Breakfast Order Users
 exhibit a preference for ordering
 breakfast slightly later in the
 morning compared to the other
 two segments.

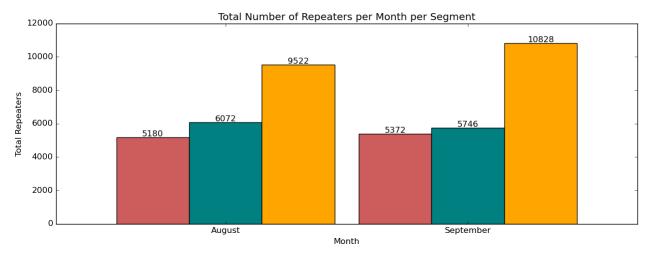
Average Order Spendings

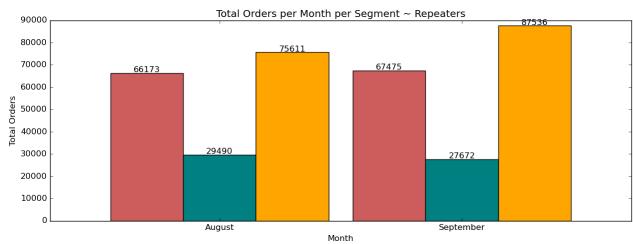
	Avg Revenue Frequent Breakfast Users	Avg Revenue High Breakfast Spending Users	Avg Revenue Recent Breakfast Order Users
August	5.12 €	7.72 €	5.52 €
September	4.99 €	7.41 €	5.45 €

- 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



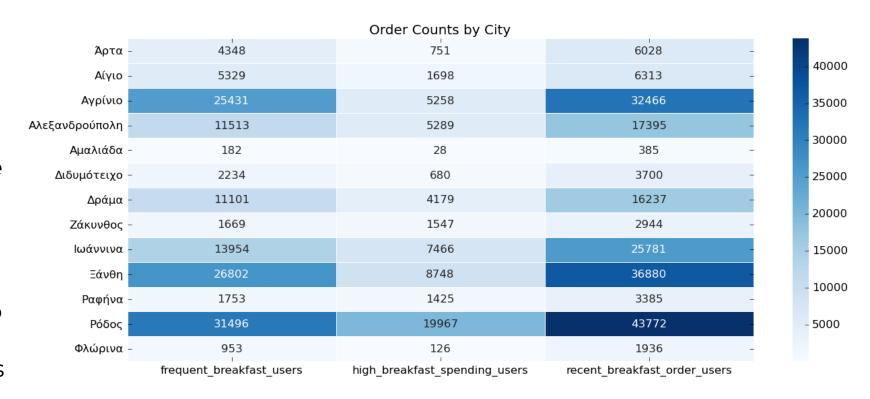




- The total number of repeaters in each segment varies between the two months
- Frequent Breakfast Users and Recent Breakfast Order Users showed an increase, while High Breakfast Spending Users showed a decrease
- The Orders of repeaters coming from High Breakfast Spending Users decreased, while those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

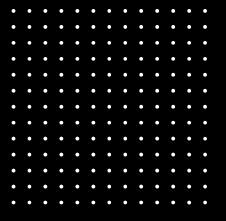
- the highest percentage of orders using coupons (12%) and orders using discounts (4%)
- High Breakfast Spending Users follow closely with 9% of orders using coupons and 3% using discounts
- Recent Breakfast Order Users also exhibit a similar pattern with 12% of orders using coupons and 3% using discounts.



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





THANK YOU!!

