

Breakfast Coupon Campaign Recommendations A data driven Solution

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Disclaimer

The proposed recommendation is exclusively data-driven, and it does not incorporate elements from any strategic marketing literature. It is not recommended for adoption, as the data may contain selection bias.

Basic Information's: Analyzing Coupon Campaign Performance

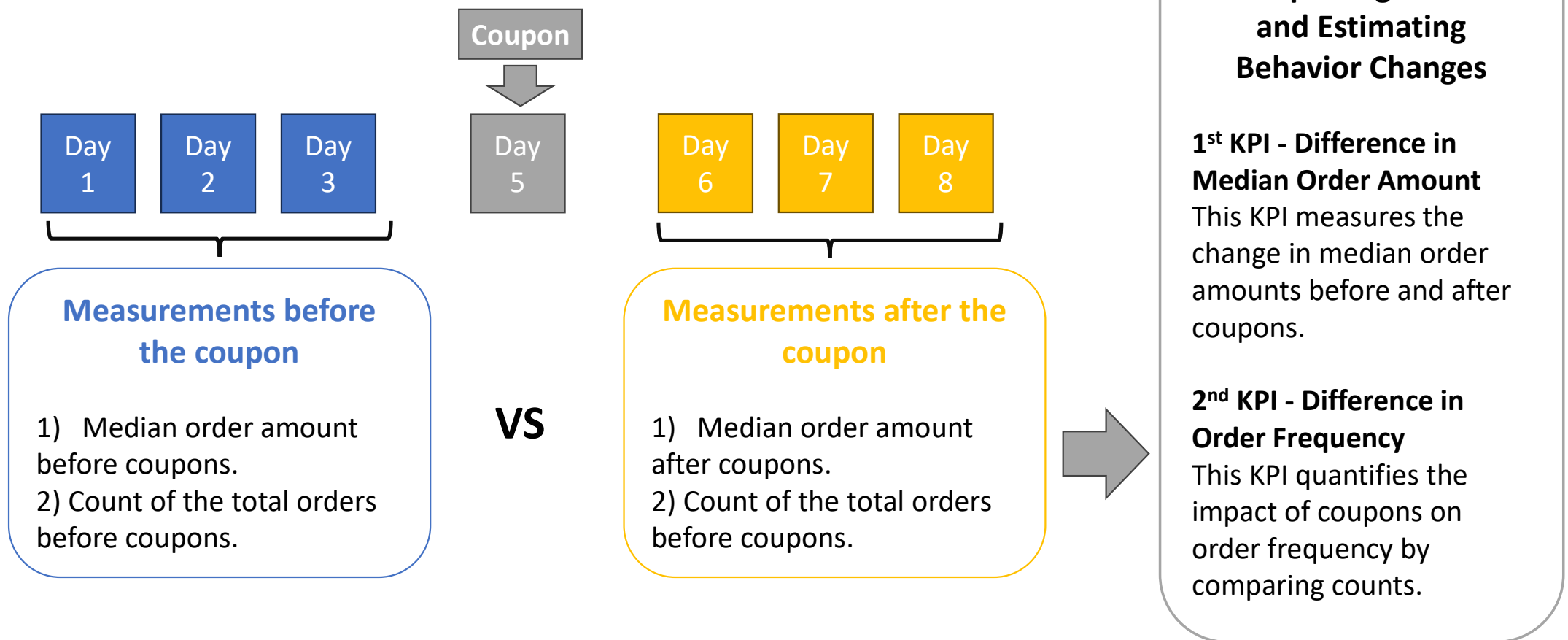
- To derive the findings of the analysis, we focused on orders that had the "breakfast" flag in the "cuisine" variable.
- The entire analysis was centered around the performance of previous coupon campaigns. We focused on customers who, at some point, had redeemed coupons.

Basic Information's: Group of Users

Users are grouped based on the following variables into the following categories:

- user_class_name: **Loyal, All Star, Infrequent, One Timers, Common User, High Spenders**
- City: **Arta, Aegio, Drama, Xanthi, Rhodes, Rafina, Agrinio, Florina, Amaliada, Zakynthos, Ioannina, Didymoteicho, Alexandroupoli.**
- Device: **iOS, Android, Desktop, MobWeb**
- paid_cash: **Paid cash, Online payments**

Technical idea: Analyzing the Impact of Coupons on Customer Behavior



Technical idea: Defining Success Criteria for the Campaign

A campaign is considered successful for a particular group of customers when, after the coupon, it is observed that:

- 1) The average order frequency of the group from efood increased.
- 2) The average order consumption amount of the group per order also increased.

Results: Analyzing the Impact of Coupons on Customer Behavior group by user_class_name

The first group of users that was analysed consists of groups based on the 'user_class_name' variable.

| Group | Number of cases | Diff of average order frequency of the group before and after coupon | Diff average order consumption amount of the group per order before and after coupon |
|---------------|-----------------|--|--|
| Loyal | 1915 | -0.084595 | -0.037681 |
| All Star | 3308 | -0.071644 | -0.085144 |
| Infrequent | 266 | 0.112782 | 0.265602 |
| One Timers | 317 | 0 | 0 |
| Common User | 379 | 0.047493 | 0.233597 |
| High Spenders | 187 | 0.021390 | 0.088271 |

Results: Analyzing the Impact of Coupons on Customer Behavior group by user_class_name

- From the user_class_name variable, it appears that the following categories respond better to coupon campaigns:
 - 1) Infrequent
 - 2) Common User
 - 3) High Spenders
- Among these, Infrequent users exhibit the highest increase.
- For the next analysis, we will focus exclusively on these three user categories.

Results: Analyzing the Impact of Coupons on Customer Behavior group by device

- Since the cases within the categories **iOS, Desktop, and MobWeb** have been limited, a differentiation will be made into **Android** and **not Android** categories.

| Group | Number of cases | Diff of average order frequency of the group before and after coupon | Diff average order consumption amount of the group per order before and after coupon |
|-------------|-----------------|--|--|
| Android | 448 | 0.131696 | 0.378311 |
| not Android | 384 | -0.031250 | -0.000851 |

- Among these, Android users exhibit the highest increase.

Results: Analyzing the Impact of Coupons on Customer Behavior group by city

- If we limit ourselves to Android users, the 'city' variable does not play a significant role in campaign selection.
- However, if we do not limit the analysis, the following cities appear to have the best adaptation to campaigns, with more than 50 cases:

| Group | Number of cases | Diff of average order frequency of the group before and after coupon | Diff average order consumption amount of the group per order before and after coupon |
|----------|-----------------|--|--|
| Xanthi | 98 | 0.183673 | 0.447619 |
| Rhodes | 188 | 0.021277 | 0.119681 |
| Agrinio | 64 | 0.109375 | 0.019792 |
| Ioannina | 221 | 0.076923 | 0.284118 |

Results: Analyzing the Impact of Coupons on Customer Behavior group by paid_cash

- The differentiation within this specific category appears to be irrelevant, as both groups behave in the same manner.

Recommendation

From the previous analysis, the two user groups with the most successful behavior in coupon campaigns are:

1. **Infrequent, Common User, and High Spenders** with **Android** devices, with a particular emphasis on the Infrequent category.
2. **Infrequent, Common User, and High Spenders**, with a particular emphasis on the Infrequent category, from the cities of **Xanthi, Rhodes, Agrinio, and Ioannina**.