

I Food CRM Data Analyst Case

iFood is Brazil's leading food delivery platform, present in more than a thousand cities.

Sustaining strong customer engagement is essential for expanding and strengthening the company's position as the market leader.

Within the data team, Data Analysts are continuously challenged to generate insights and add value to the business through open-ended projects. This case is designed to simulate such a challenge.

Here, you are provided with a sample dataset that mimics customer information and their interactions with I Food's marketing campaigns.

Your task is to analyse the data, identify business opportunities and insights, and suggest data-driven actions that can improve campaign performance and bring value to the company.

This exercise is meant to evaluate your analytical skills and knowledge for two potential roles:

Business Data Analyst

- Carry out thorough exploratory analysis enriched with business insights.
- Deliver data-driven recommendations that generate value and demonstrate strong communication skills to influence decision-making.

Advanced Analytics Data Analyst

- Conduct deep exploratory analysis using advanced statistical methods and analytics tools.
- Create data products such as predictive models or customer clusters to improve business outcomes.

Choose the role you want to focus on and tailor your approach accordingly. We are especially interested in how you structure your solution and the reasoning behind your chosen methods.

Remember, your results should be understandable for both technical and business stakeholders.

Once finished, you may send your solution to ifoodbrain_hiring@ifood.com.br

with the subject line: iFood DA/Data Case Solution / "Candidate Name". Normally, feedback will be provided within a week.

Key Objectives

Explore the dataset beyond simple averages and counts — extract insights, establish cause-and-effect relationships, and better understand customer characteristics.

Propose and explain a customer segmentation strategy based on observed behaviours.

Build a predictive model that maximizes profit for the upcoming marketing campaign.

The Company

iFood is a well-established player in the retail food industry. Currently, it serves hundreds of thousands of registered customers and nearly one million consumers annually.

The company offers five main product categories: wines, specialty meat, exotic fruits, premium seafood, and confectionery. Each of these is further divided into gold and regular product lines.

Customers can shop through three main sales channels: physical stores, catalogs, and the company's website. While iFood has shown stable revenue and profitability over the past three years, growth forecasts for the next three years are not optimistic.

To address this challenge, strategic initiatives are being considered — with particular emphasis on enhancing marketing campaign effectiveness.

The Marketing Department

The marketing team is under pressure to allocate its budget more efficiently. Recognizing the importance of data-driven decisions, the CMO has assembled a small group of data scientists. Their mission: develop a predictive model to support direct marketing strategies.

If successful, this initiative will demonstrate the value of analytics and help convince skeptics within the organization.

The Objective

The team's primary goal is to create a predictive model that maximizes profit for the next direct marketing campaign, scheduled for next month.

This sixth campaign will promote a new gadget to the customer base. To prepare, a pilot campaign was run with 2,240 randomly selected customers, who were contacted by phone. Purchases were tracked over the following months.

The pilot cost was 6,720 MU, while revenue from sales total 3,674 MU. Overall, the campaign produced a loss of -3,046 MU with a success rate of 15%.

The aim is to build a model that can predict purchasing behaviour and apply it to the wider customer base — allowing the company to target likely buyers and exclude non-responders, making future campaigns profitable.

In addition to maximizing profit, the CMO is also interested in better understanding the characteristics of customers who are inclined to purchase the gadget.

The Data

The dataset includes socio-demographic and firmographic details for the 2,240 customers contacted. It also flags those who responded positively by purchasing the product.

Objectives

1. Conduct creative and detailed data exploration to provide the marketing team with a deeper understanding of respondent characteristics.
2. Develop and describe a customer segmentation based on behavioral patterns.
3. Build a predictive model to optimize profits in the next campaign.
4. Include any additional analyses you consider necessary.

Deliverables

1. Data exploration findings.
2. Customer segmentation strategy.
3. Classification (predictive) model.
4. A concise business presentation.