

RECOMMENDER SYSTEMS

GROUP F - MAY 2024

Master Degree Program in
Data Science and Advanced Analytics

Business Cases with Data Science Course



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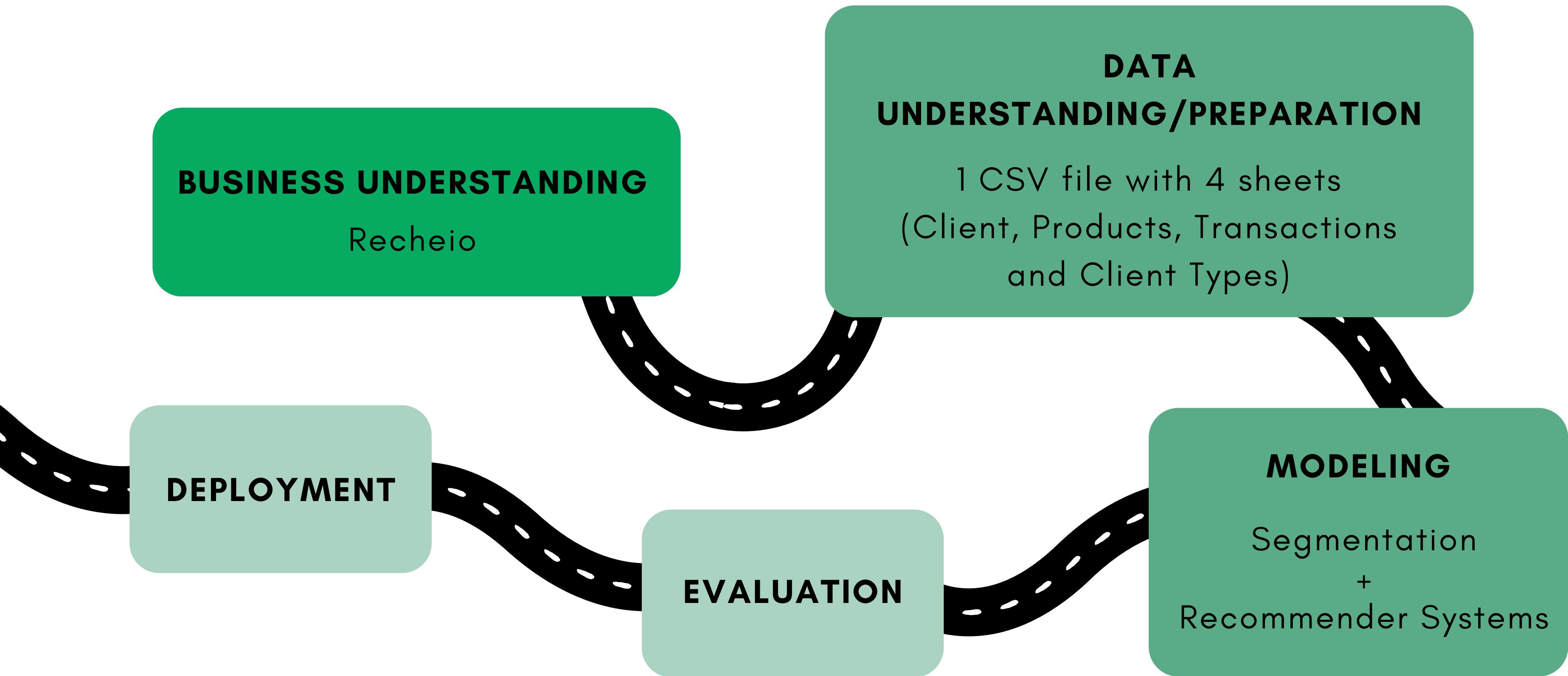
BUSINESS CHALLENGE



Objectives

- Increase Relevancy in Each Customer
- Maximize Customer Engagement by Implementing Product Recommendations

PROCESS ROADMAP





STORES & PLATFORMS

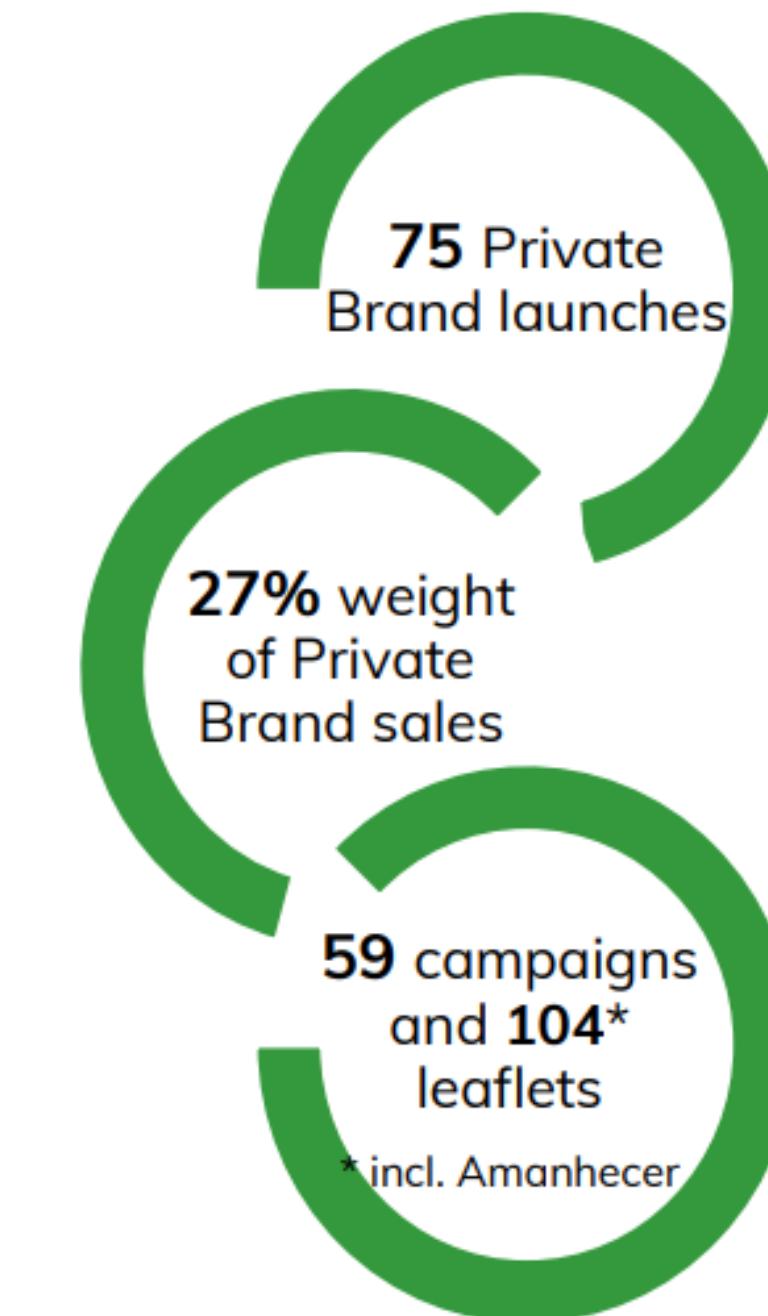
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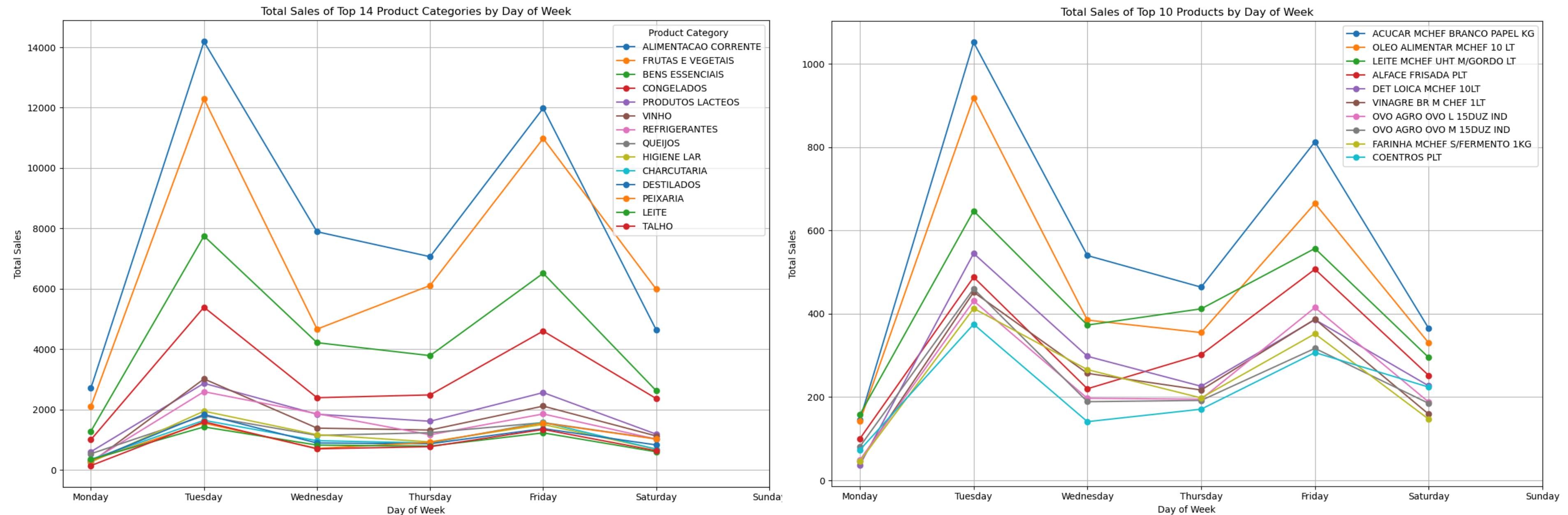
BUSINESS UNDERSTANDING

Leader in Cash&Carry – with presence in:

- Traditional Retail
- **HoReCa Channel**



DATA UNDERSTANDING

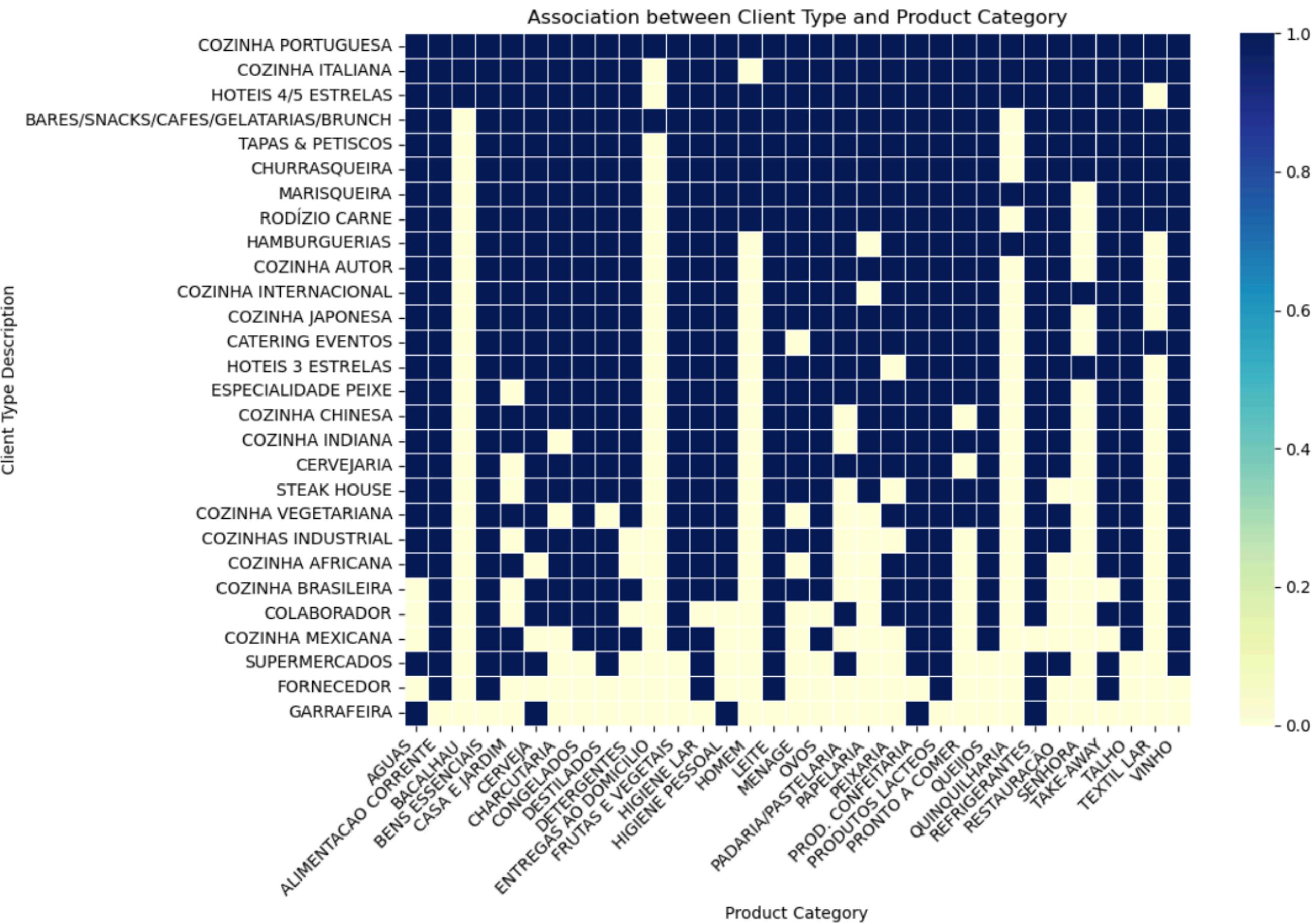


The transactions mostly done on **Tuesday** and **Friday**

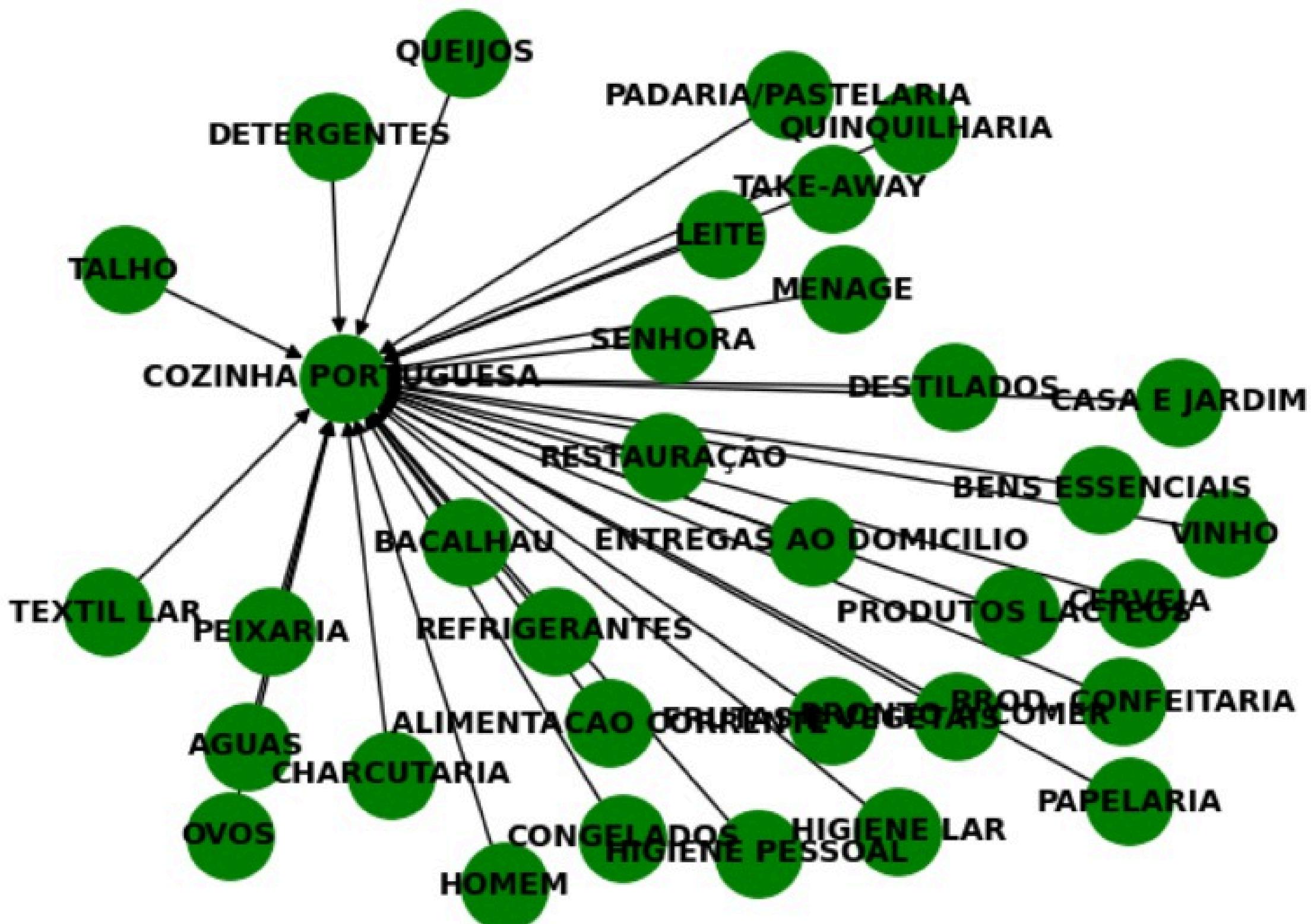
DATA UNDERSTANDING

Most Purchases
Portuguese Cousine

Least Purchases
Garrafeira



DATA UNDERSTANDING



**Client Type with
most purchases**



Alimentação corrente



High relation with
other categories

MARKET BASKET ANALYSIS

Top 5 Product Categories Purchased Together

- 1 Detergentes + Alimentação corrente
- 2 Leite + Alimentação corrente
- 3 Charcutaria + Alimentação corrente
- 4 Higiene Lar + Alimentação corrente
- 5 Destilados + Alimentação corrente

MARKET BASKET ANALYSIS

Top 5 Product Descriptions Purchased Together

- 1 *Gel. Cat. Gourmet Choc. e Morango 4.5 ltr + Gel. Cat Gourmet Baunilha 4.5 ltr*
- 2 *Alho Francês Cortado 750 Gr MCHEF + Pepino RCH*
- 3 *Ice Tea Lipton Manga Lata 33 CL + Ice Tea Lipton Pêssego Lata 33 CL*
- 4 *Refrigerante Coca Cola Zero 33 CL + Refrigerante Coca Cola Original 33 CL*
- 5 *Gel. Cat. Gourmet Morango 4.5 ltr + Gel. Cat Gourmet Baunilha 4.5 ltr*

RECOMMENDATIONS

Recommendations of **Product Category** per **Client Type**

COZINHA PORTUGUESA

- Vinho
- Leite
- Alimentação corrente
- Bacalhau
- Bens essenciais

COZINHA ITALIANA

- Entregas ao Domicilio
- Homem
- Vinho
- Leite
- Alimentação Corrente

RECOMMENDATIONS

Recommendations of **Product Description** per **Client Type**

COZINHA PORTUGUESA

- *Vinho Alentejo Marquês de Borba BCO 75CL*
- *Sangria Casal Garcia TTO 75CL*
- *Leite em Pó Nido Gordo 700G*
- *Sidra Somersby Blackberry 33CL*
- *CANELA MOIDA DIAMIR PET 710G*

COZINHA ITALIANA

- *Toalha Mao MCHEF 1F 21X23*
- *Porco Entremeada com Entrecosto RCH*
- *Queijo Brie 60% Int. KG*
- *Chocolate Granulado Globo KG*
- *Feijão Branco Gulosso 2,5KG*

RECOMMENDATIONS

Recommendations of **Product Description** per **Cluster**

Segment 1

- Refrigerante Sumol Laranja 1,5LT
- Abóbora Cubos 1 KG 4G RCH
- Noz Moscada Janota Moida 500GR
- V.P Setúbal BSE BCO 37,5CL
- Grellos de Nabo PLT

Segment 2

- Natas Vaqueiro Creme Cuisin LT
- Doce MChef Frutos Vermelhos 3,5K
- Molho Rancheira Guacamole 2L
- Fiambres Da Perna Extra MasterChef
- V. Alanadra TTO 37,5CL

MODEL MANAGEMENT CYCLE

TEST

A/B Testing

Compare with what
was really bought

Click Through Rate,
Conversion and
Retention Rates

Satisfaction surveys



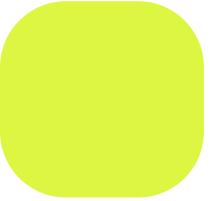
DEPLOYMENT

Align with CRM
and Sales Force

Suggest new menu
options that
require new items



Fruits + Vegetables
Hamburguerias



THANK YOU!

RECOMMENDER SYSTEMS

APRIL 2024

