



Optimising Product Recommendations

A Comprehensive Approach to Data-Driven and Subject-Oriented Product recommendations

Our Team



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— Situation Assessment —

- 1 Business Situation
- 2 Problem & Solution

— Project Setup —

- 3 Methodology
- 4 Data Understanding

— Evaluation —

- 5 Recommender Systems
- 6 Possible Improvements

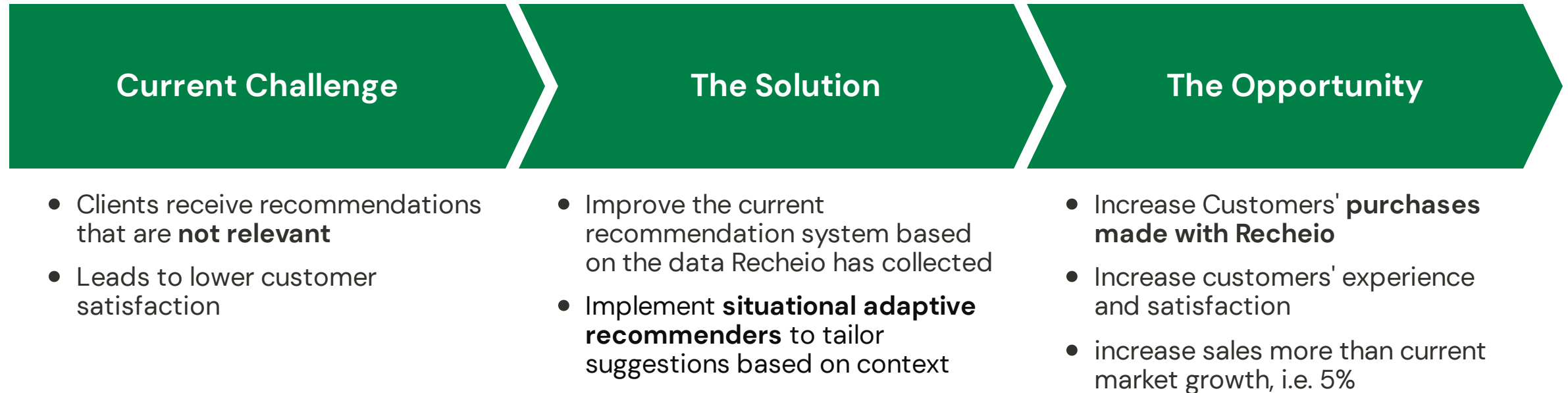
— Next Steps —

- 7 Deployment Plan
- 8 Retrospective

Recheio's Last Fiscal Year

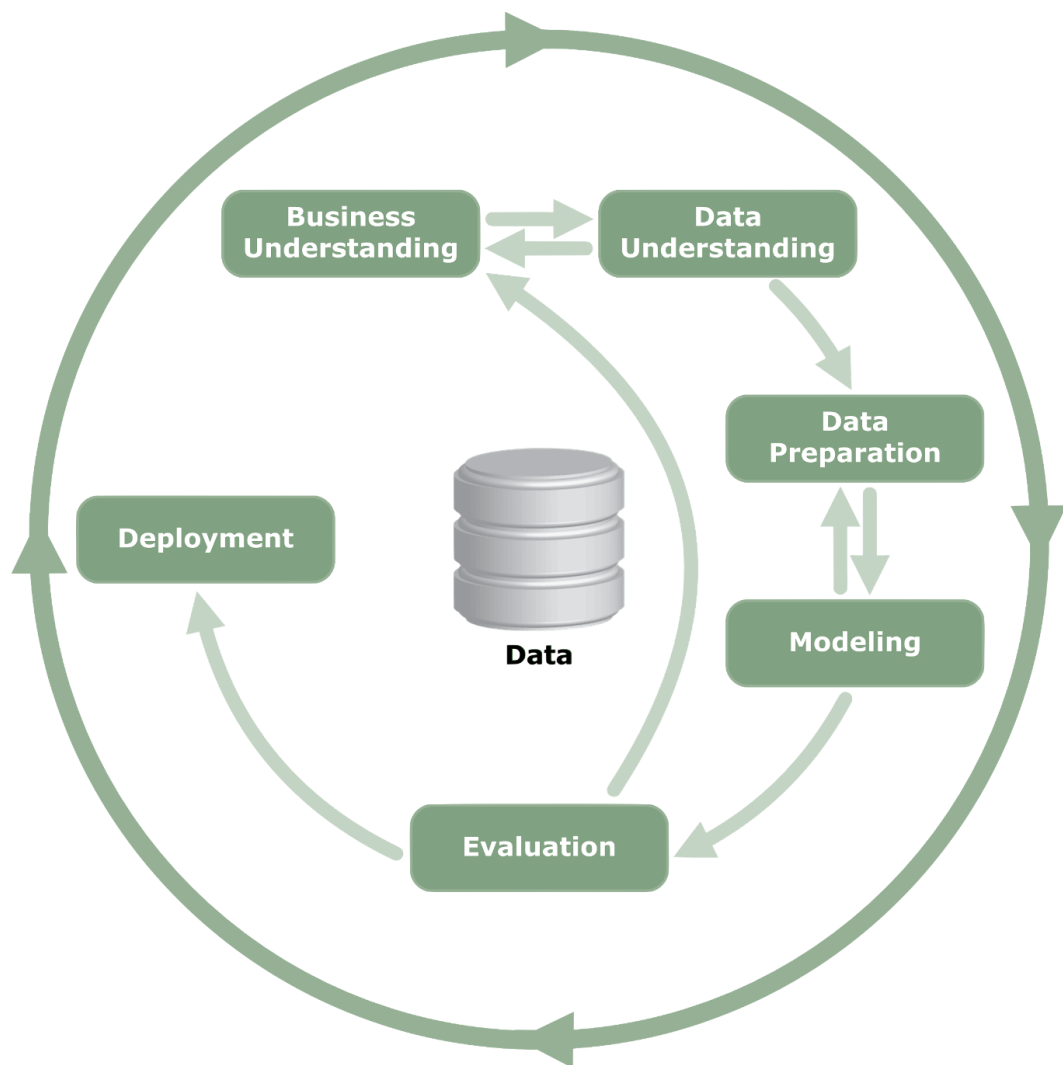


Business Challenge & Strategic Solution



Methodology

Crisp-DM



Data Understanding

- Analyse best selling products and valuable customers
- Understand current product-client match

Modelling

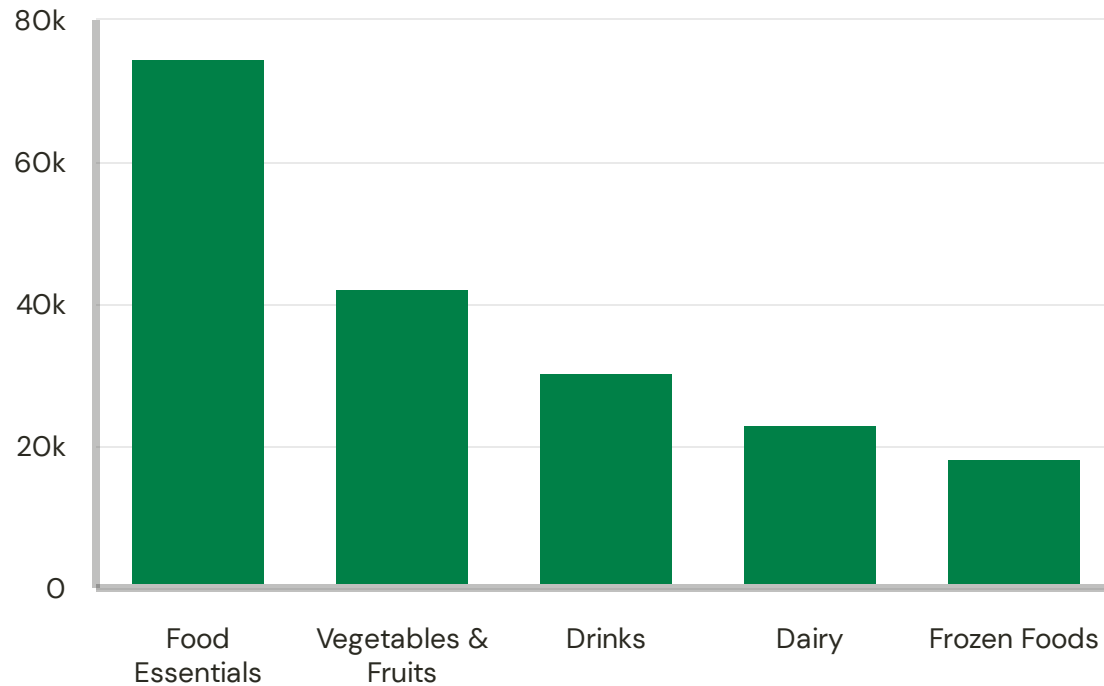
- Iteratively prototype and pivot
- Make use of association rules, correlations and common recommender algorithms

Evaluation

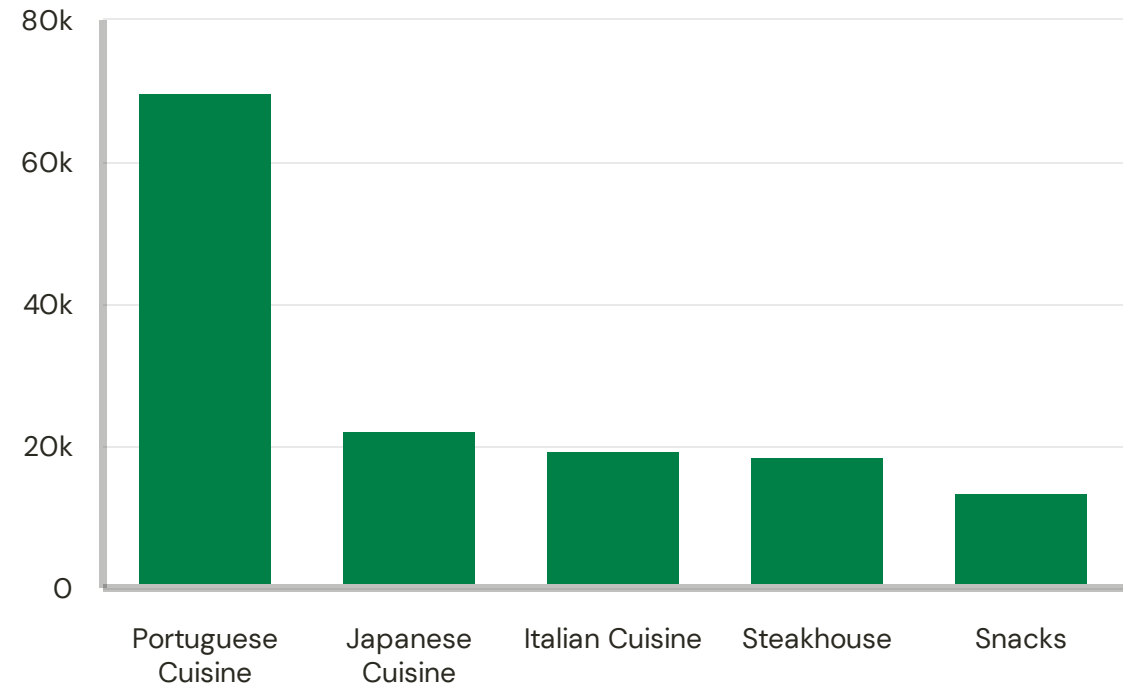
- Apply Monte Carlo validation
- A/B Testing

Product Categories and Client Type

Frequency of Product Categories

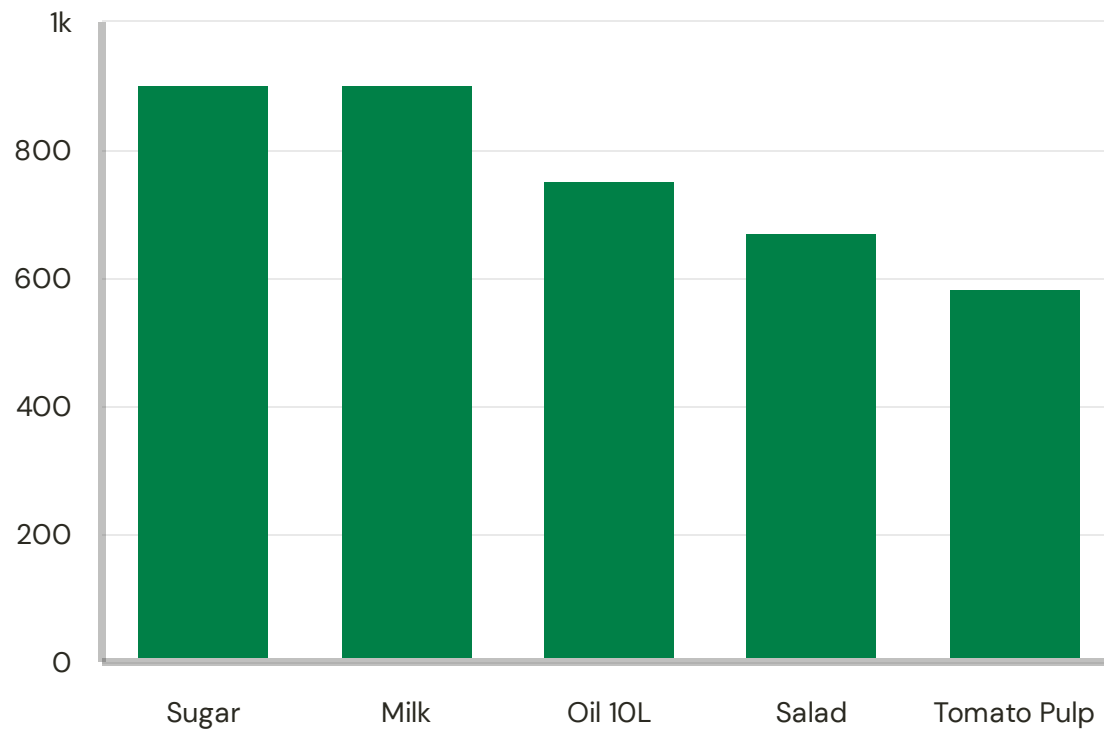


Frequency of Client Types

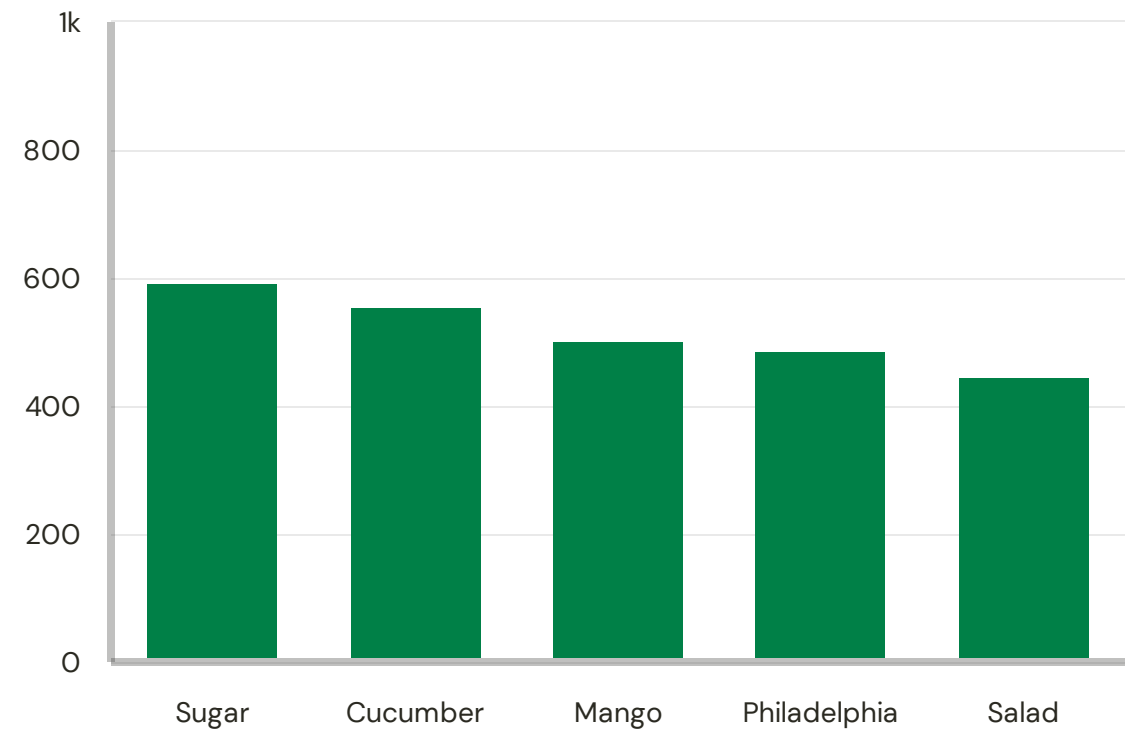


Product – Client Match

Portuguese Cuisine most Popular Products



Japanese Cuisine most Popular Products



Four critical views on Recheio's Website



Landing Page



Basket View



Product Search



Product View

6 Different Recommender Systems

1 Recency & Frequency

Products Sorted after recency & frequency

2 Try something new?

Display products that are commonly purchased by the client type.

3 Did You Forget?

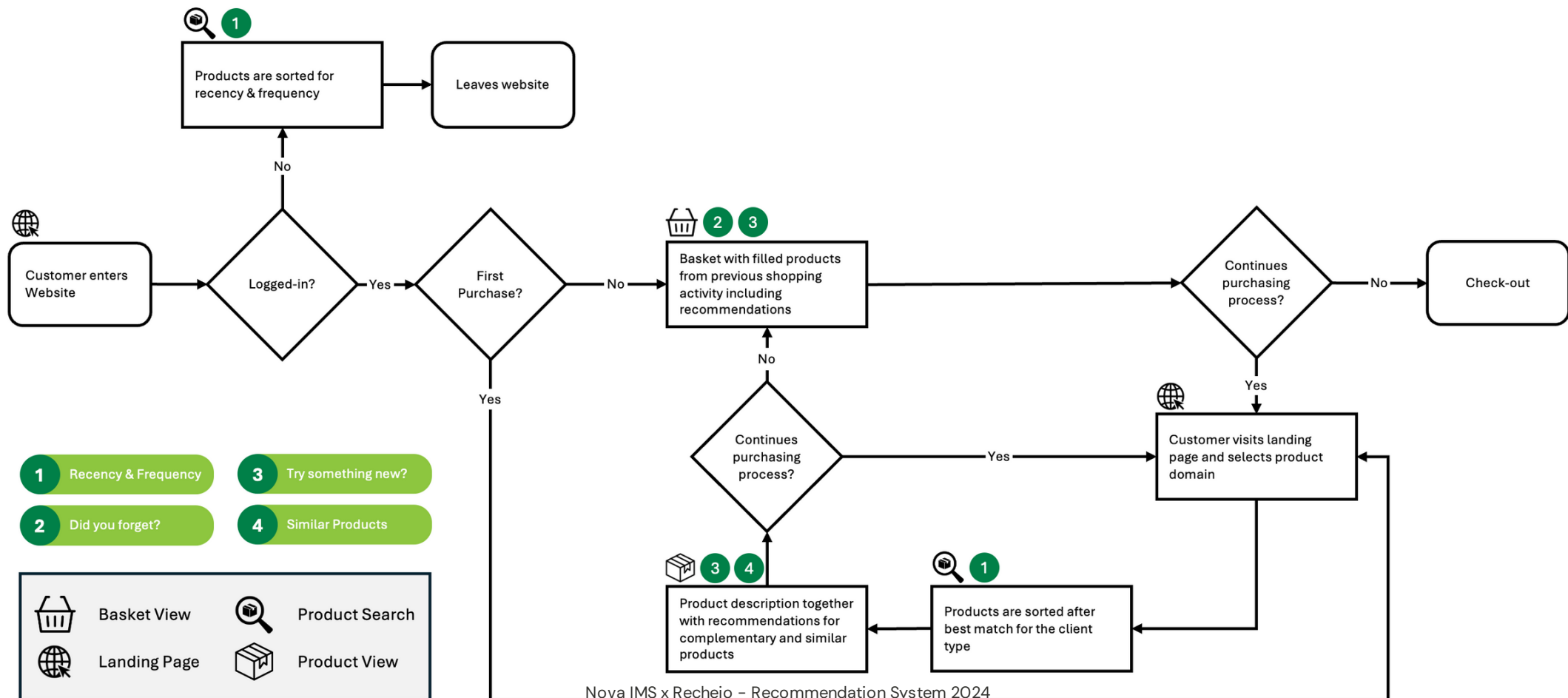
Show products which the user typically buys

4 Similar Products

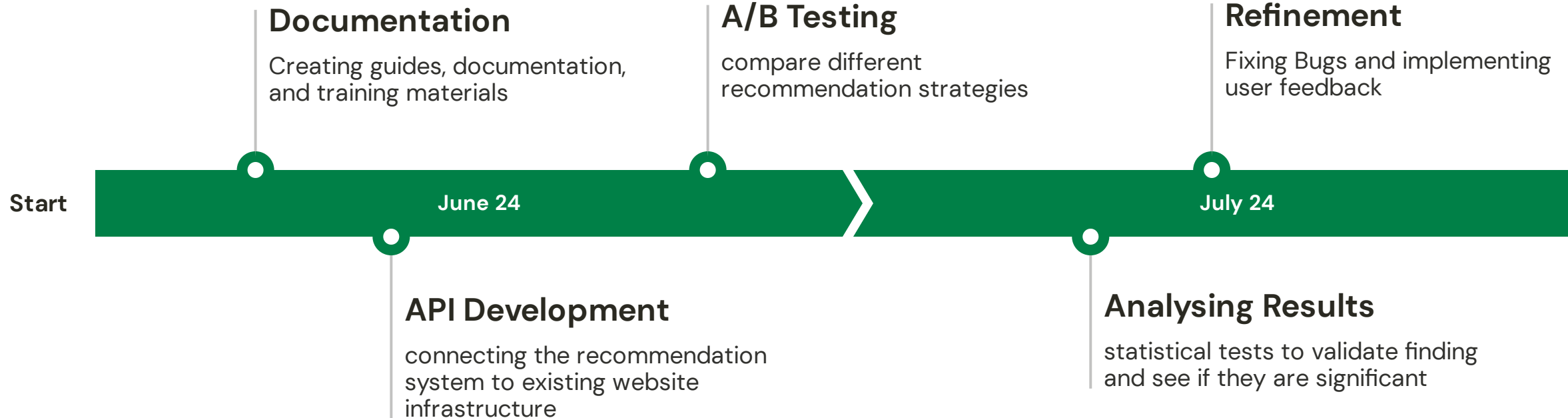
Present products that are frequently purchased together.

Bottom Line: recommendations need to be **fast** and **valuable** to the customer

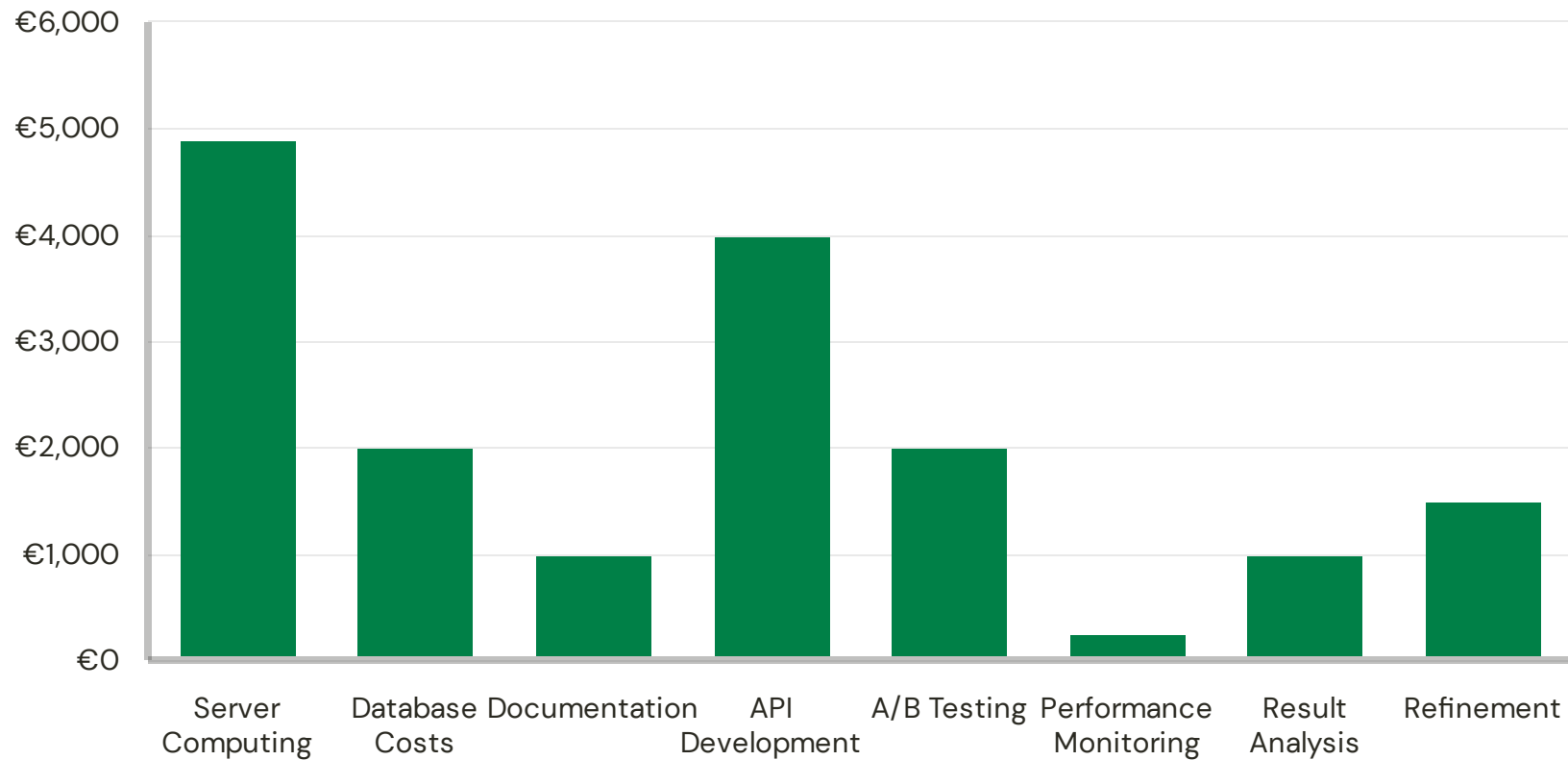
Customer Journey



Next Steps: Timeline and Milestones



Implementation Costs



16,650€

total implementation
costs over the course of

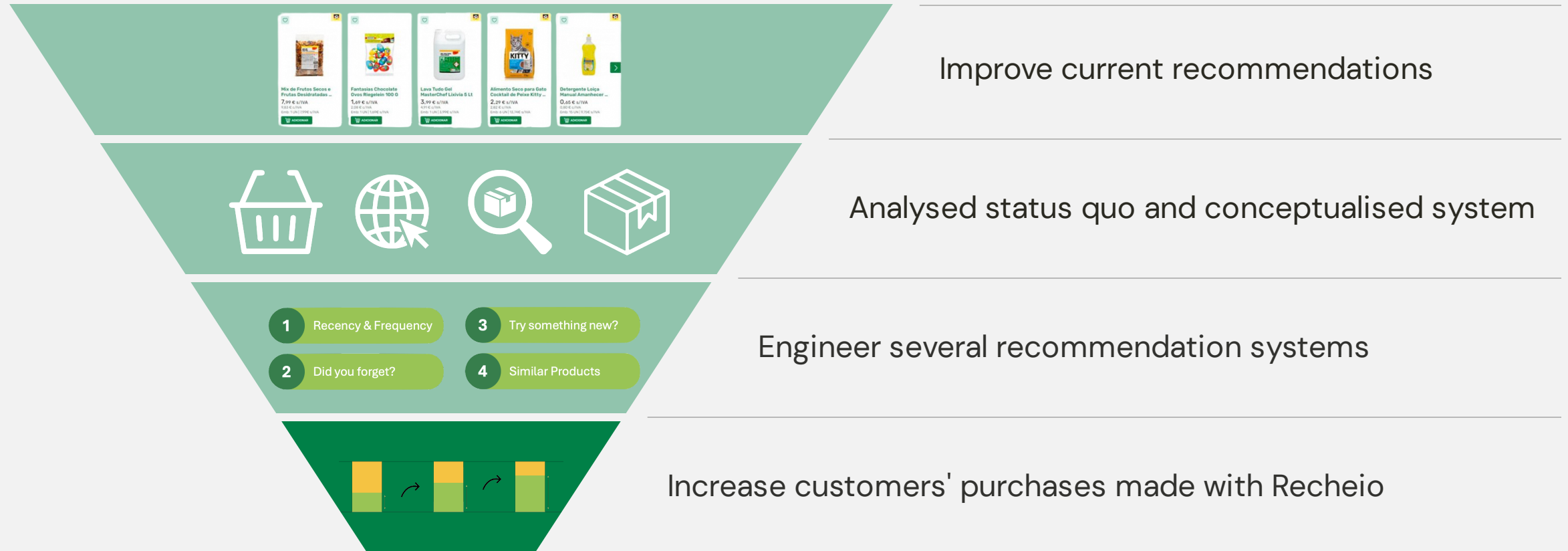
2 months

Limitations

- ✓ **Based on shopping history**
- ✓ **Based on personal characteristics**
- ✓ **Based on customer & product similarity**

- ✗ **Quantity of products**
is not regarded in the current system
- ✗ **Monetary dimension**
is not considered due to lack of data
- ✗ **Stock Verification**
is dependent on live data
- ✗ **Weighted Frequency**
as some products might be released later

Initial Goals and Implementation

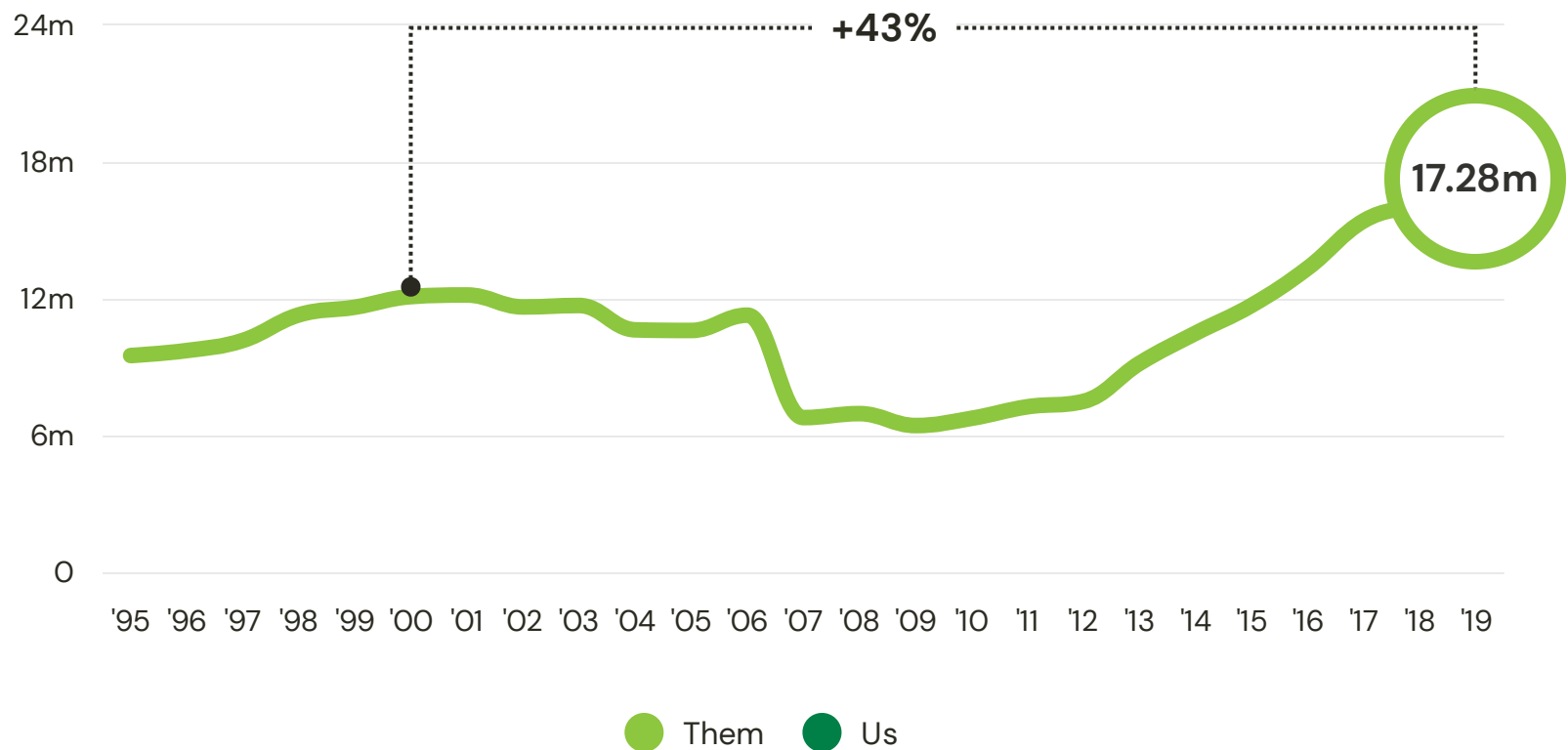




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Tourism Activities Developments



4.4%

Expected CAGR

Market is characterised by **low margins** and **high demand elasticity**.