# Solving business issues with data science.

*This is an example of a supporting document presented to a managerial panel.

Find the related technical document here: essais.io

What are the business issues to be addressed with data science methods, and where should be our main focus?

Our two main issues are one: the **turnover stagnates since 3 years** and two the **marketing spending is above than predicted.** We should focus on the first issue that is more important but take the second into account.

90%

65%

The turnover stagnates since 3 years
90%

The marketing spending are above predicted
65%
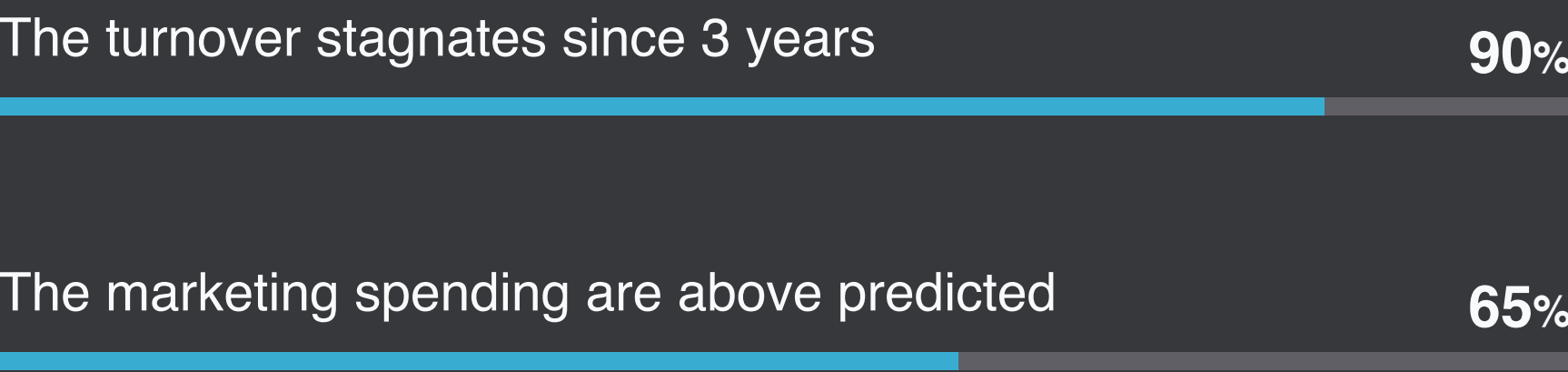
What are the main causes?

Business Inside

How much does each cause contribute to the two main business issues?

Here we present the main causes that produce the two business issues we have seem above, and we rate how much these causes are relevant.

Lack of knowledge about the customers   90%

Lack of knowledge about the market   50%

The digital jump have been done very poorly   68%

High attrition rate   82%

Marketing uncontrolled spending   65%

Solving cause one.
How can we learn more about our customers?

We have done a customer analysis, segmentation, predictive scoring, survey and sentiment analysis. To recall this was the major contributor to the first issue we try to solve.

Lack of knowledge about our customers   **90%**

Customer
Analysis / segmentation

Costumer
Predictive scoring

Costumer
Survey / Sentiment analysis

01

Business Result
Customers have been segmented by recency, frequency and average order. We now can treat different customers differently.

02

Business Result
Customer's satisfaction is on the rise. From 58% positive review to 65% in the last three months.

Solving cause two.
How can we gather more insights about the market?

We decided to lay out an interactive market analysis, a survey and to start a competitive intelligence activity. We have closely worked with the sales and marketing team to reach these results.

Lack of knowledge about the market   **50%**

Solutions

Interactive
Market analysis

Survey

Competitive
Intelligence

Results

01
Business Result
The market trend is much clearer to the R&D, the marketing and the sale team.
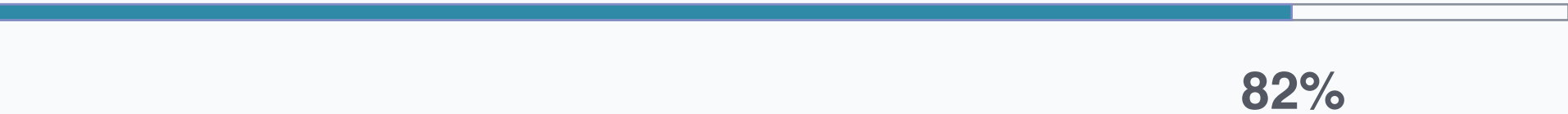
02
Business Result
Improved communication between the R&D, the marketing and the sale team, as they now share the same CI platform.

Solving causes three.
How can we retain employees?

We worked with the HR department to predict when a good or experienced employe will leave the firm.

High attrition rate

82%

HR analytics
Predictive modelling
Recommendation on career plan

Business result

The attrition rate when down by 10 points in the last three months.

Solving causes four.
How can we better control the marketing spending?

With the marketing team, we built a monitoring dashboard and find new way to measure and forecast the marketing spending.

Marketing uncontrolled spending   **65%**
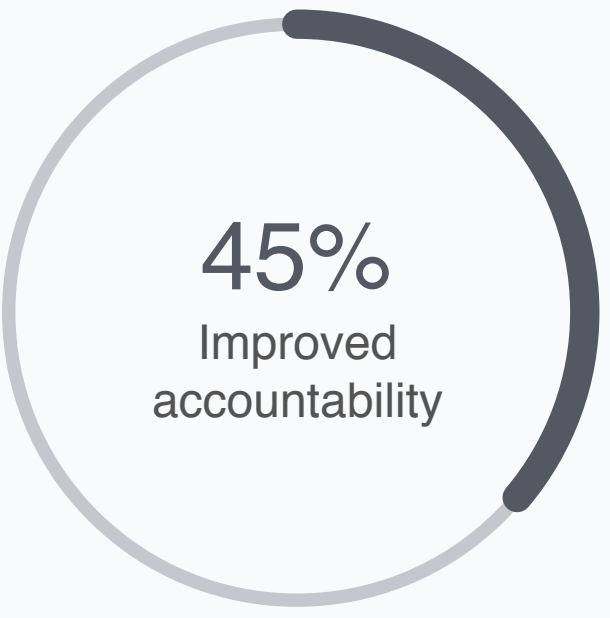
Solution one
Monitoring dashboard

Solution two
New metrics definition

Business results

95%
Improved measurement
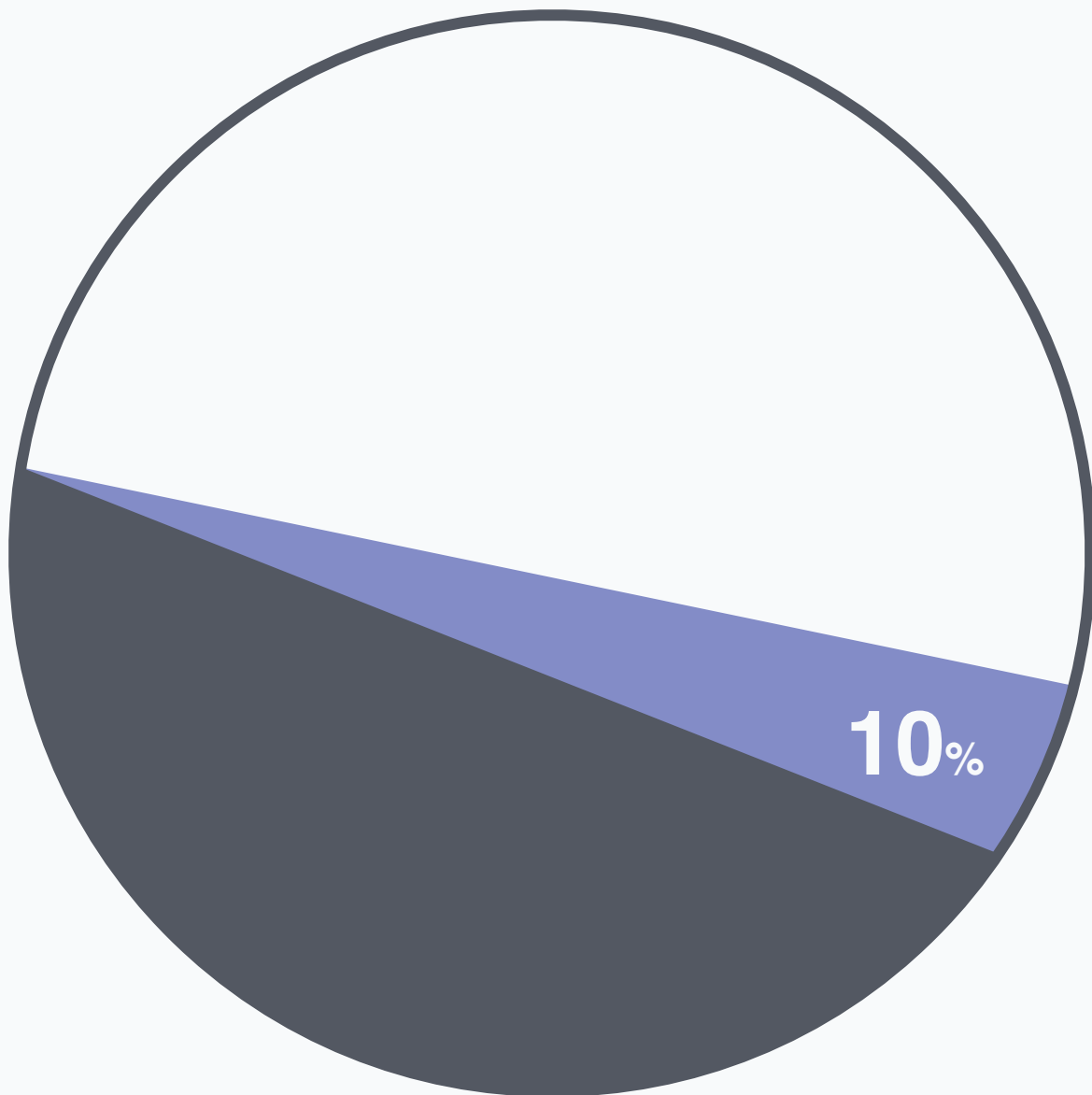
45%
Improved accountability

Solving cause five.
## How can we improve the digital presence?

With a SEO analysis, A/B testing and a recommendation system we have seem a lot of improvement in the company's digital strategy. There is more visits, less bounces and a better conversion rate.

The digital jump have been done very poorly   **68%**
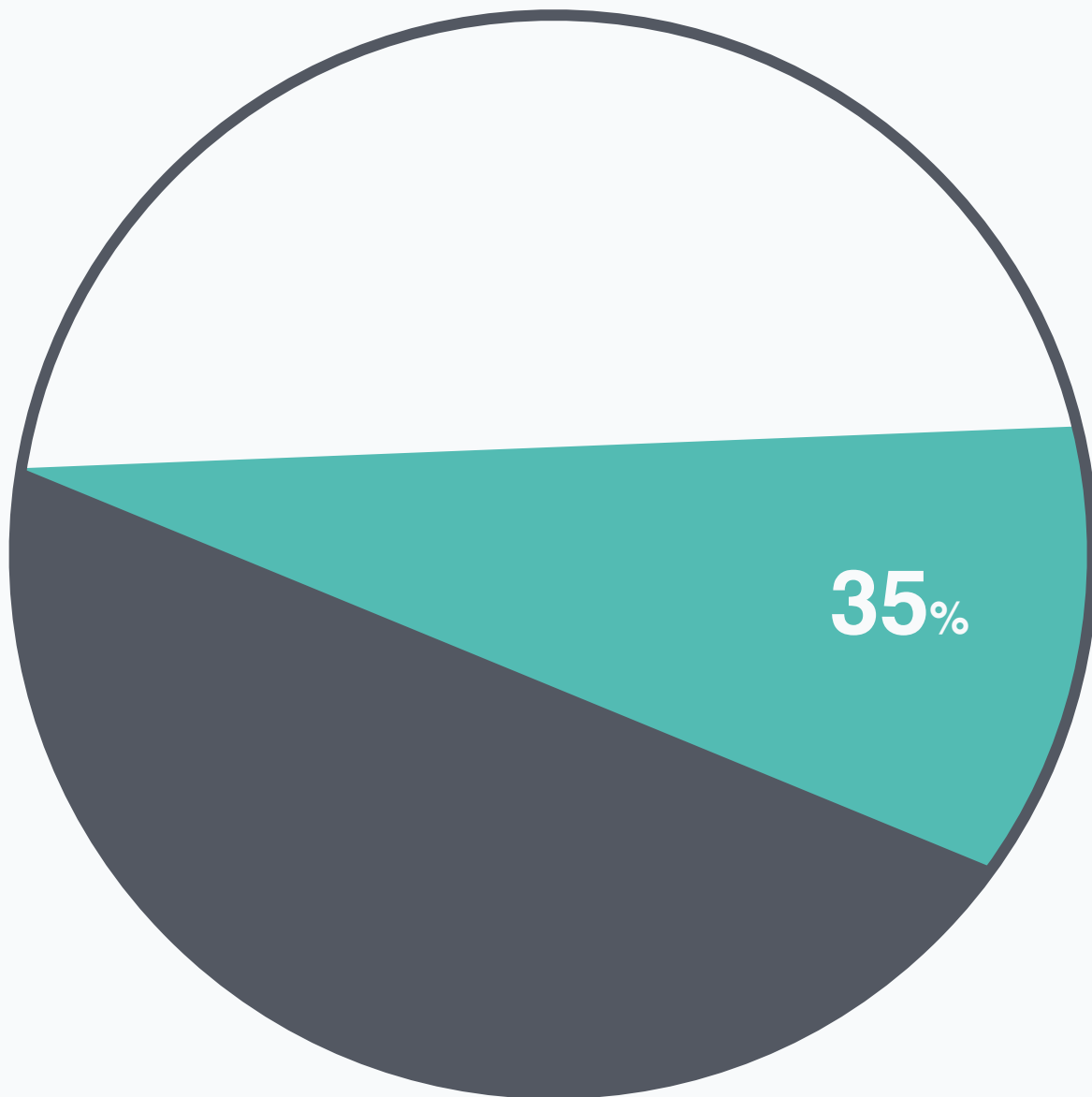
10%

25%

35%

Recommendation System

The improved products recommendation has raised the average order by 10%
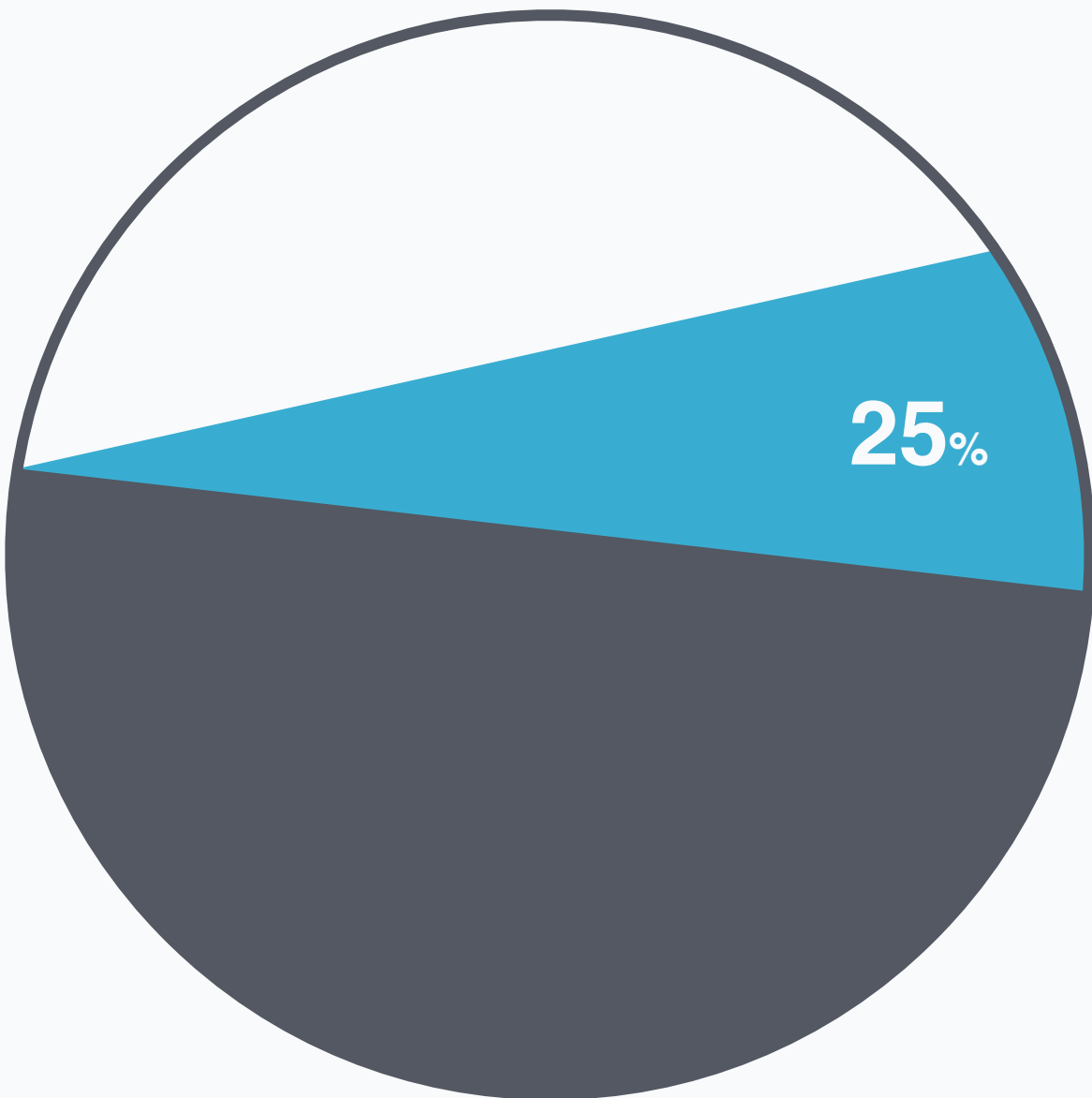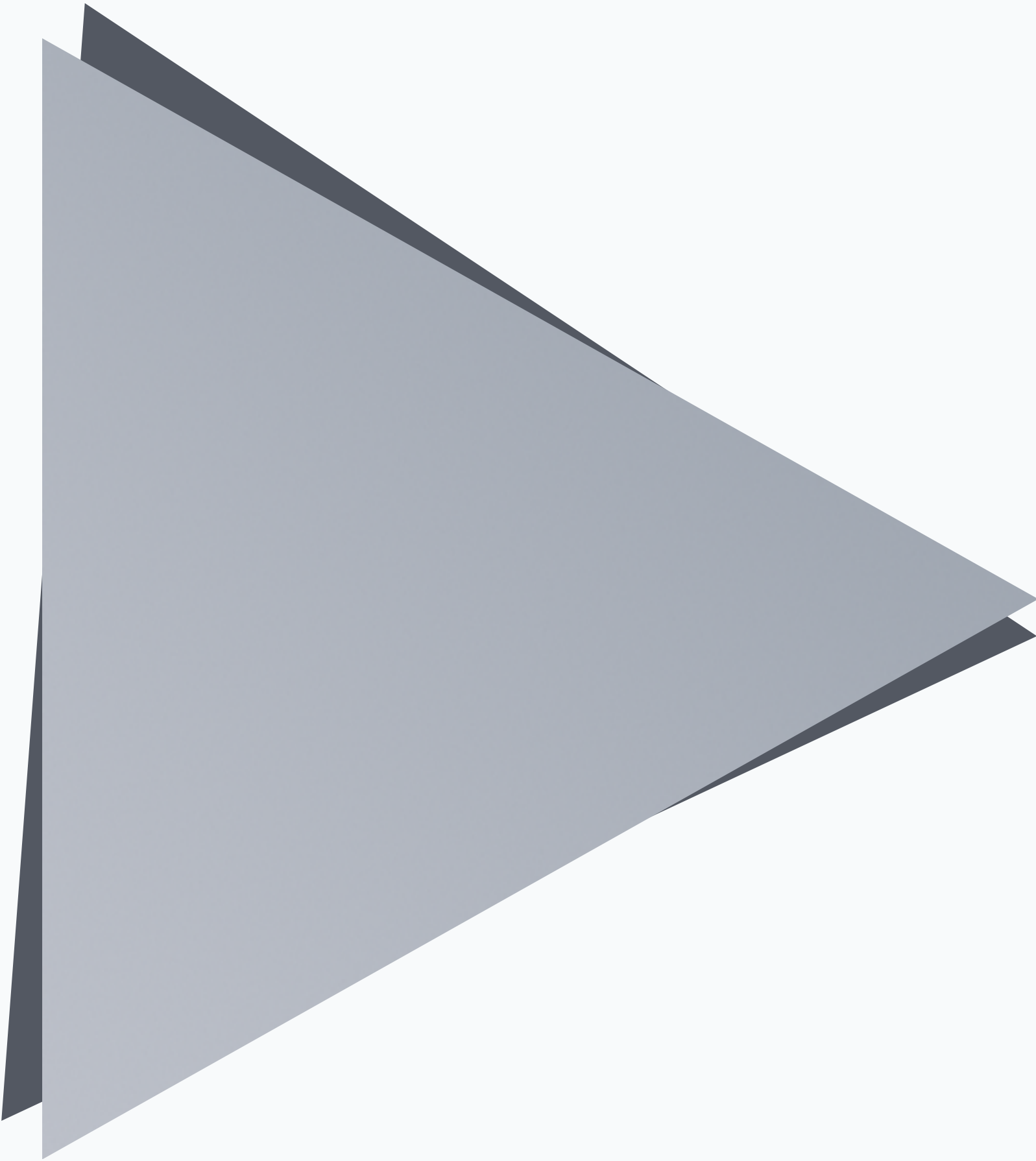
A/B testing

Improved landing page, newsletter and product presentation.

SEO Analysis

Increased the google rank by 35% in three months.

Global results

Business growth

After three years the business growth is back and we can see new opportunities.

+05%

Marketing spending

The marketing spending has been better controlled with the new dashboard.

-15%

Customer satisfaction

The customers say they are more satisfied than a year ago.

+12%

Attrition rate

Experienced employee choose to stay longer in the business.

-07%

What are the next steps?

Next step 01

Increasing the number of customers

Reducing customer attrition

Lead scoring

Optimizing marketing campaigns

Next step 02

Serving customers better

Cross-selling products

Optimising products and pricing

Increasing engagement

Next step 03

Serving customers more efficiently

Predicting demand

Automating tasks

Making enterprise apps predictive

Thank you