Customer Story: Barilla Group

TRADE PROMOTION OPTIMIZATION

Barilla Group was established in 1877 as a family-owned, Italy-based food manufacturer. The company cemented itself as an expert in pasta and ready-to-use sauces around the world over the course of a century and has since expanded its business to restaurants and other goods. It is now an international group present in more than 100 countries.

Like most markets in the consumer goods industry, the competition Barilla Group faces is increasingly fierce and forces companies to offer discounts in the pricing battle.

In fact, businesses across the globe spend over $1 trillion annually on trade promotions to stay ahead of competition (Nielsen). This spend is the second highest expenditure after Cost of Goods Sold (COGS).

Yet, as the Promotion Optimization Institute's market research has shown, managing trade promotion is a typical pain point for Consumer Packaged Goods (CPG) companies and continues to be one of the greatest challenges in the industry.

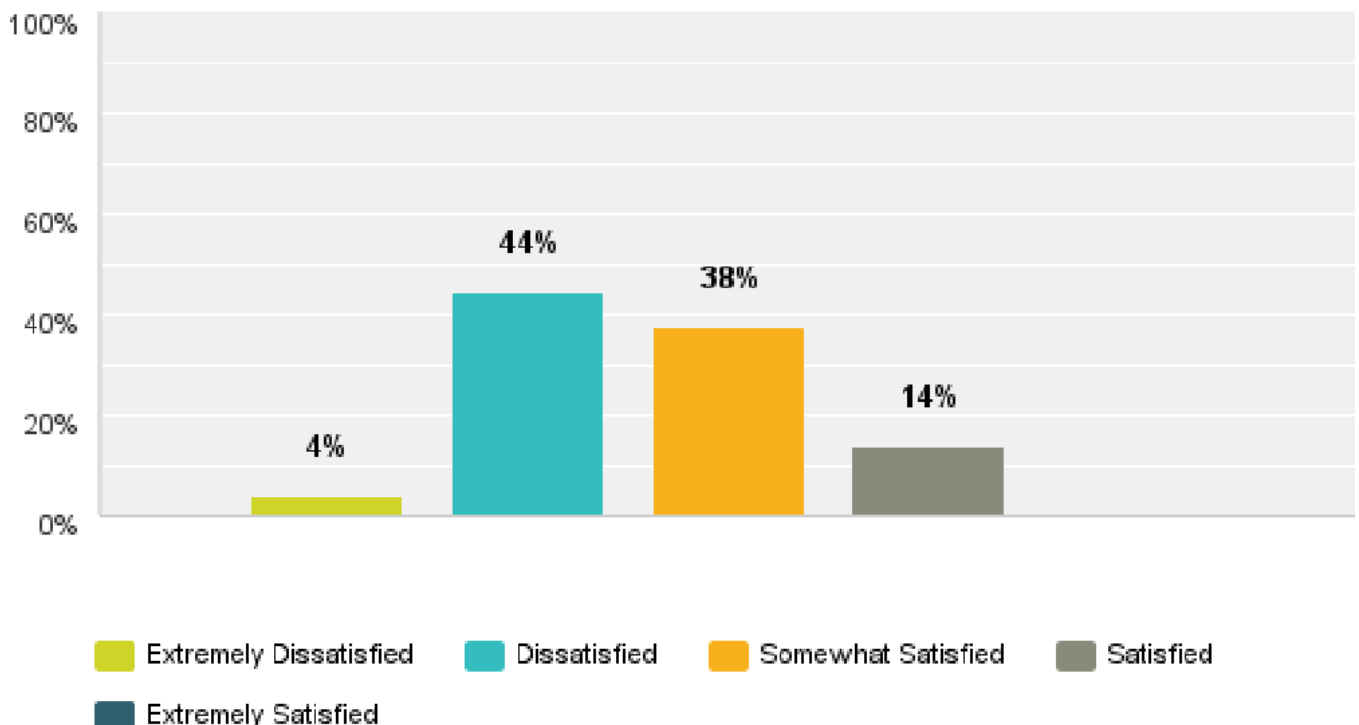# Optimizing Trade Promotion with Machine Learning

CONTINUOUS IMPROVEMENT

When asked whether managers are satisfied with their ability to manage trade promotions in the same survey, the general response could be qualified as lukewarm at best.

Mediocrity wasn't good enough for Barilla Group Barilla Group's core value to drive continuous improvement led it to seek new avenues for change within trade promotion management and, ultimately, to the doorsteps of digital transformation. Through its desire to operate with transparency and greater intelligence, Barilla Group found it could leverage AI and machine learning to more effectively plan trade promotions by working with Neal Analytics.

Barilla Group worked with Neal Analytics, Ernst Young, and Microsoft to create a solution to enable key account managers to create trade promotion plans with optimized ROI and guide trade marketing strategies that will propel them in the fast changing and competitive market.

The collaboration drove the development of a cloud-based analytics solution that could evaluate the cost and benefit of past promotional campaigns and predict future campaigns' ROI on-the-go.

Chart 1: Responses to the statement:
"You are satisfied with your ability to manage trade promotions."

Legend:
- Extremely Dissatisfied
- Dissatisfied
- Somewhat Satisfied
- Satisfied
- Extremely Satisfied

Bar values: 4%, 44%, 38%, 14%

Source: *2017 POI TPx Retail and Executive Survey*

LEVERAGING HISTORICAL DATA

The first component of the promotion optimization solution was to leverage historical sell-in and sell-out data and provide a 360-view of past promotion outcomes. By leveraging machine learning techniques, Neal Analytics was able to estimate baseline sales and calculate incremental sales driven by each individual promotion event during its run. This enabled further calculation of promotion profitability and ROI which were key success metrics in evaluating Barilla Group's trade promotion performance.

Neal Analytics created an interactive report to model the incremental impact on sales resulting from past promotion campaigns. The uncovering of historical data patterns has provided Barilla Group key account managers with a better understanding of and deeper insights into what drives the success of a promotion campaign, which promotion tactics works best, which region witnesses higher promotion uplift, and in which situation consumers are more likely to buy promoted products.

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> *"86% of consumer goods companies tell us at the Promotion Optimization Institute (POI), via the POI TPx and Retail Execution Survey, that they are not satisfied with their ability to manage trade promotions. And, unfortunately, this level of satisfaction has declined 5 percentage points from the prior year's survey."*
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> *2017 POI TPx and Retail Execution Survey*
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OPTIMIZING PROMOTION PLANNING

The second component of the solution was to optimize promotion planning and predict their future outcomes. To facilitate their future decision-making, a set of machine learning models were additionally developed to predict how would be. Historical sales patterns were analyzed to uncover key factors impacting promotion performance. Using machine learning, the models predicted various promotion KPIs, such as baseline and incremental sales, for multiple products based on dozens of segments such as specific stores and time of year.

Neal Analytics' Trade Promotion Optimization predictions and simulations identifies the best time and the tactics for maximum profitability and effectiveness in future campaigns. These insights enable Barilla Group's key account and trade marketing managers to quantify promotional impact on sales.

OPERATING WITH INTELLIGENCE

By creating a machine learning-driven solution for promotion optimization, Neal Analytics has equipped Barilla Group with an engine can forecast promotion profitability and ROI based on innumerous variables.

Now that Barilla Group can optimize promotion planning by predicting investment outcomes, the business can truly operate strategically and with intelligence.

Thanks to its continuous search for improvement, Barilla Group has begun their digital transformation journey and now looks forward to turning trade promotion from a business challenge to a business asset.

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"This solution fills a critical need for our key account managers and revenue growth management team to evaluate historical promotion performance and enable better promotion planning where both Barilla Group and our customers benefit in the future."

Emilie Bianchi Revenue Growth Manager
Western Europe,
Barilla Group

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