

**FMCG Tech Trends Webinar Series**



**02. Master Data  
and Data Science**

**01 Global Tech Trends 2030.  
Computer Vision**  
Feb 2022

**02 Master Data and Data Science**  
June 16, 2022

**03 TPO and RGM**  
Sept 2022

**04 Predictive and Prescriptive Analytics**  
Nov 2022

# Data Science: Best Practices



**OLEKSII REUTOV**

Leader in Digital Services  
and Consulting

SoftServe

# WHY AI IS SO ROCKY?

**53%**

of projects make it from artificial intelligence (AI) prototypes to production

**56%**

of businesses adopt at least one AI function in 2021  
+6% vs. 2020

**64%**

of high performers' AI workloads run on public or hybrid cloud

# Case 1

## TRADE PROMOTION SIMULATION ACCELERATOR

## CASE 1

# PROBLEM

Each year consumer companies spend about \$1 trillion on trade promotions campaigns. Unfortunately, two-third of promotions don't break even\*, eventually bringing down companies' profitability. Some of these promotion campaigns could be optimized using simulations.

\* - Numbers were taken from the [report](#) provided by Nielsen.



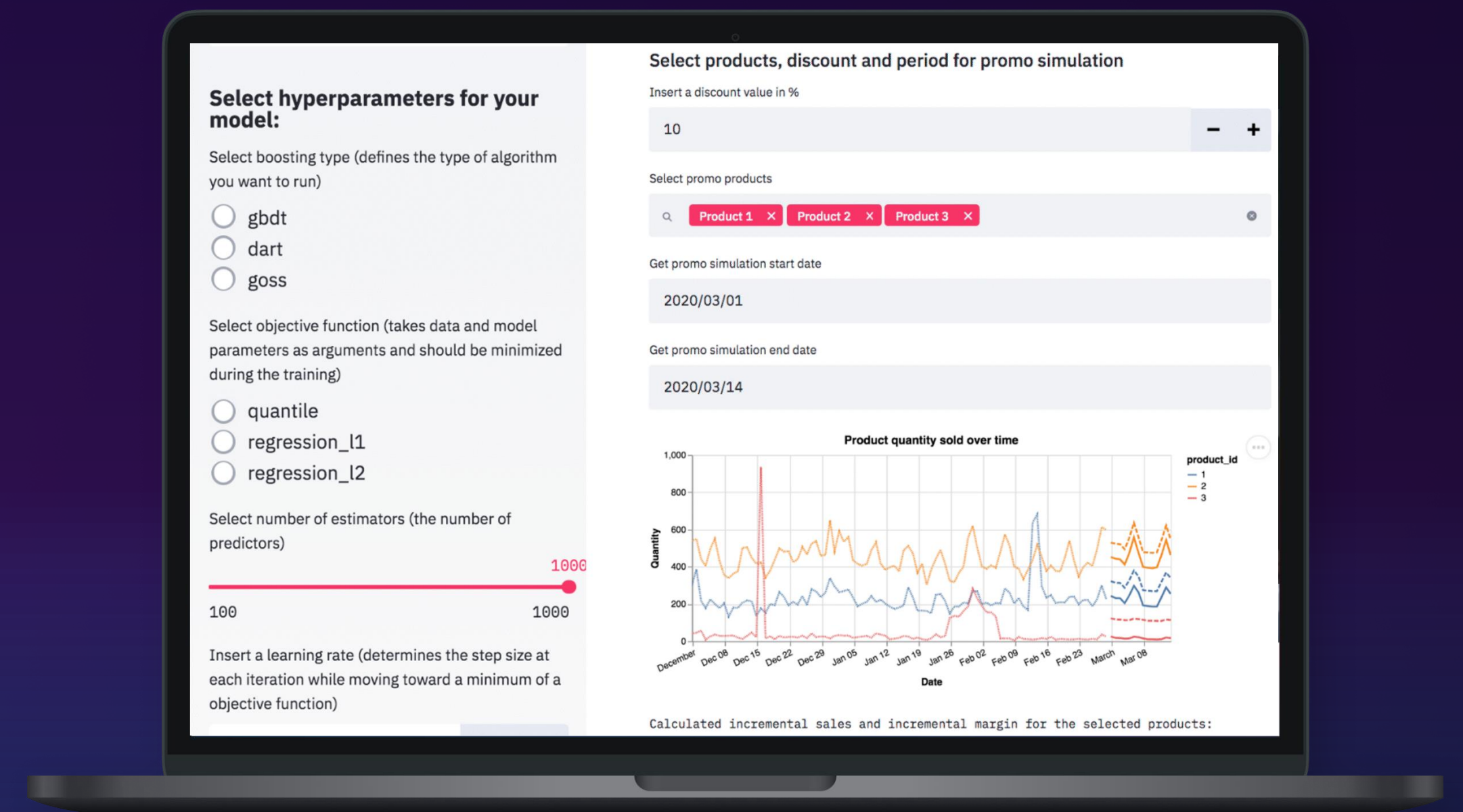
## CASE 1

# SOLUTION

**Our accelerator** automates and generalizes the process of trade promotion simulation. We use historical data to understand potential result of products inclusion into the promotion campaign. By providing interactive interface we give our customers ML tool that allows them to test hypotheses using their own data in days, not weeks or months.

In such a way our solution does the following:

- **Empowers** SMEs with no prior ML expertise
- **Provides** default and customizable algorithm hyperparameters
- **Enables** what-if analysis to evaluate different campaign scenarios



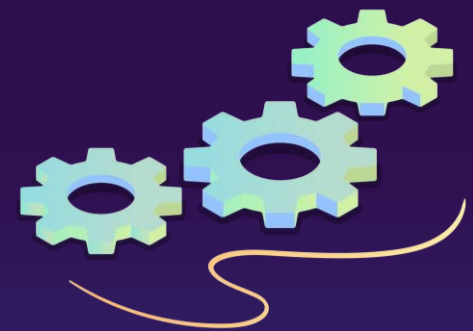
## CASE 1

# IMPACT



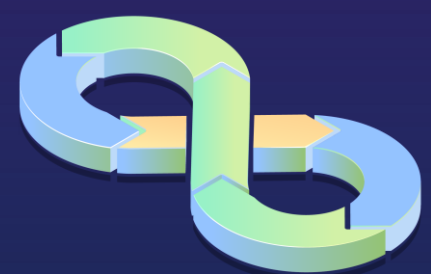
**22%**

of promo with marginal profitability eliminated



**2-4 weeks**

decreasing of feasibility study



**30 minutes**

for deployment

# Case 2

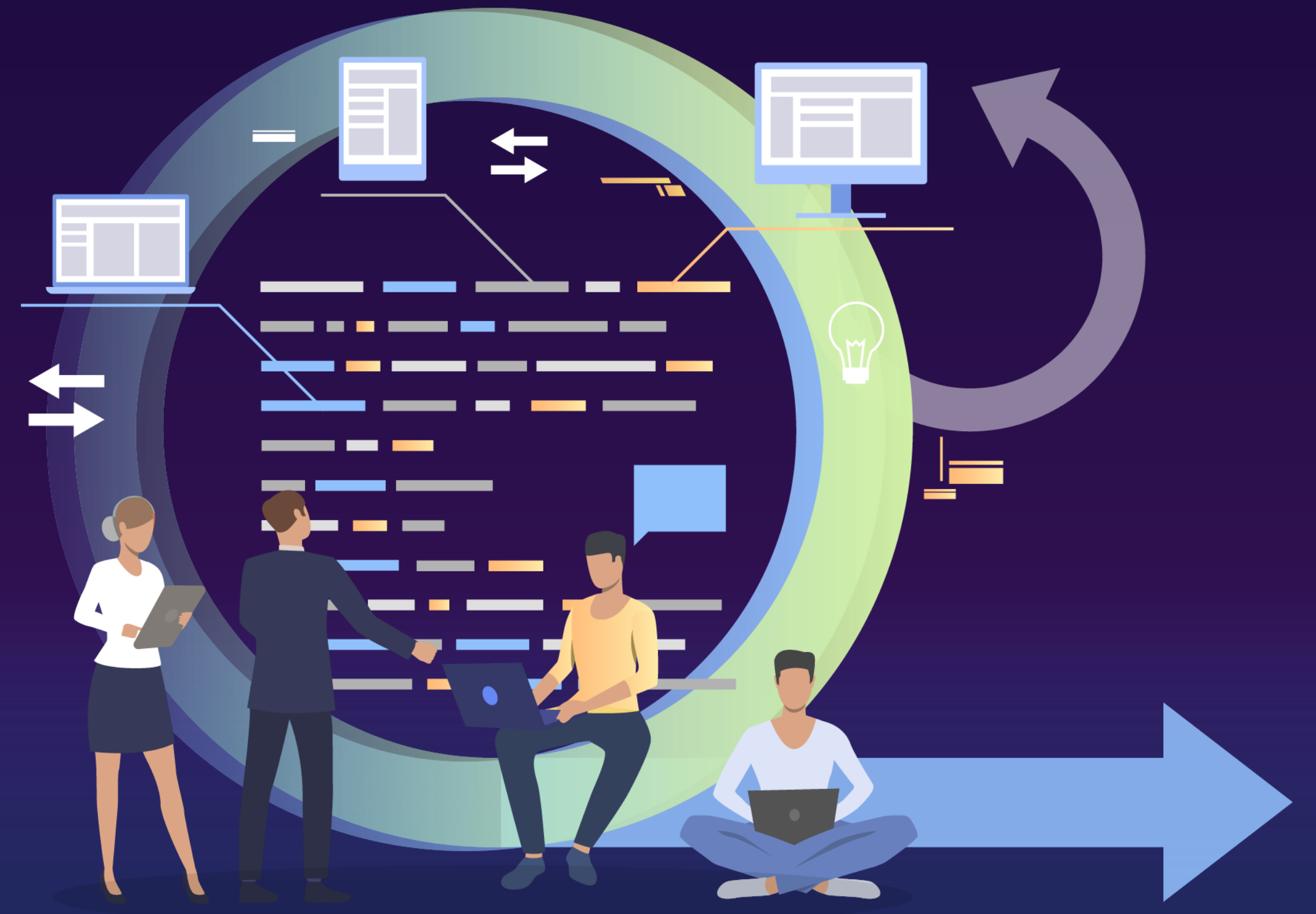
## TRADE PROMOTION & ASSORTMENT MANAGEMENT TOOL



## CASE 2

# PROBLEM

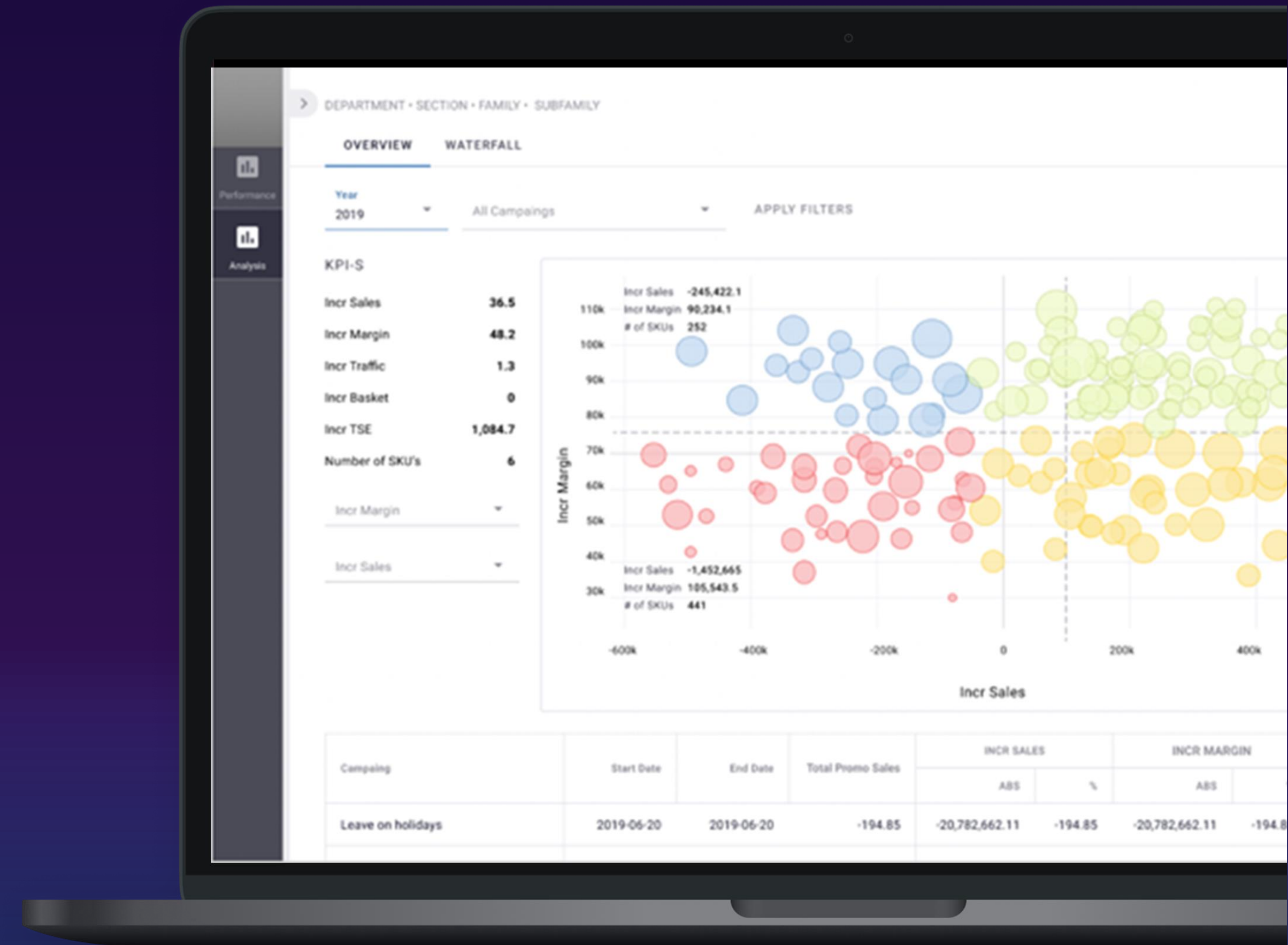
Leading retailer in the Middle East, Africa, and Asia regions has a strong need to automatize business process. The goal of automatization was to decrease people efforts required for planning promotion campaign and define assortment for each store. Previous solution was not stable, did not have satisfied level of security, and did not provide all information for experts to take the necessary decision.



## CASE 2

# SOLUTION

The solution created by SoftServe unified design and code-base of two different tools, improved algorithm calculations to provide in-time information for decision-makers, and added state-of-the-art simulations. The solution architecture was based on AWS infrastructure with automatic CI/CD pipelines. The new tool allowed to improve security level to the corporate standards and stability for smooth and fluent customer journey.



## CASE 2

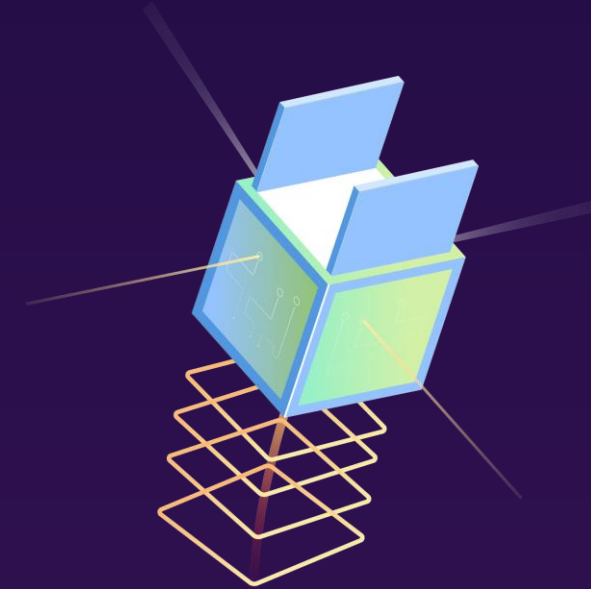
# IMPACT



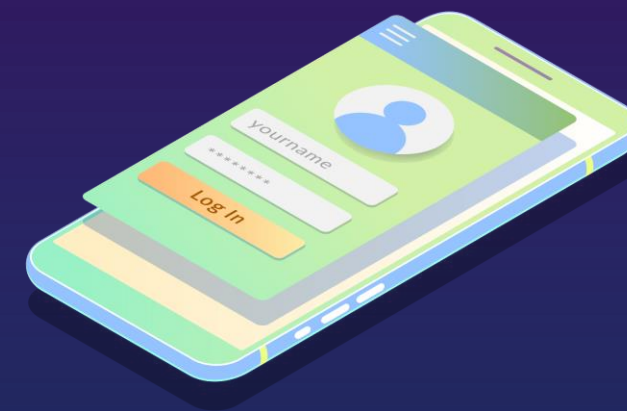
**\$50M +**  
in incremental  
top-line revenue



**4-6x**  
Increases productivity



**1-2 days**  
for monthly update  
(from about a week)



**5 to 500**  
concurrent users  
(from 5 before)

# Case 3

## ML POWERED DEMAND PREDICTION FRAMEWORK

## CASE 3

# PROBLEM

Global consulting firm seeks for an enhancement of the current demand forecasting solution for its customers. Solution users are raising issues with stability, level of security and forecasting accuracy that jeopardizes clients satisfaction and increases probability of losing clients.



## CASE 3

# SOLUTION

SoftServe designed the solution that provides short-term and long-term forecasts and hosted on AWS Cloud. It consists of a set of demand prediction models that produce forecasts of SKU sales for retailers and distributors on a monthly and weekly basis. Stability of the solution and forecast reliability are ensured by applying various data preparation techniques followed by quality check procedures. AWS infrastructure allows the solution to reach highest level of security.



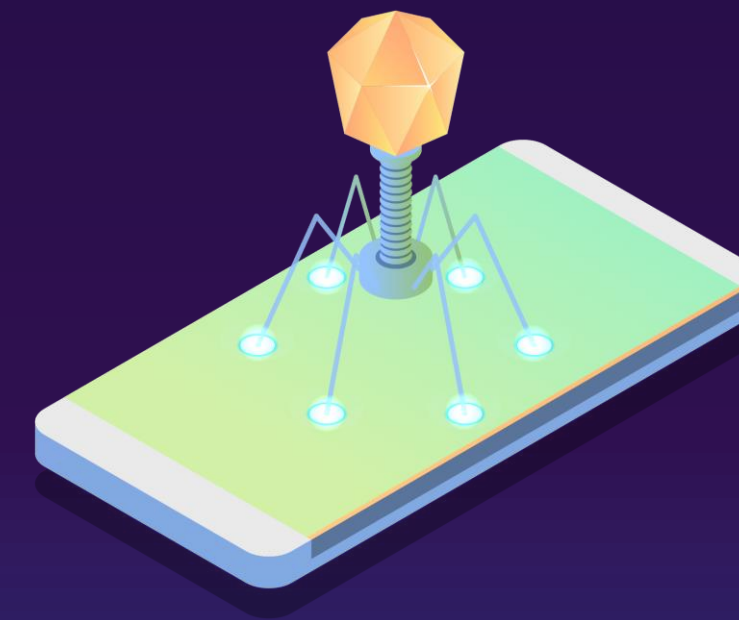
## CASE 3

# IMPACT



**16%**

Decreasing the average forecast error (MAPE)



**3 times/month**

Reducing the number of model failures

# Case 4

## PROMOTION PLANING TOOL



## CASE 4

# PROBLEM

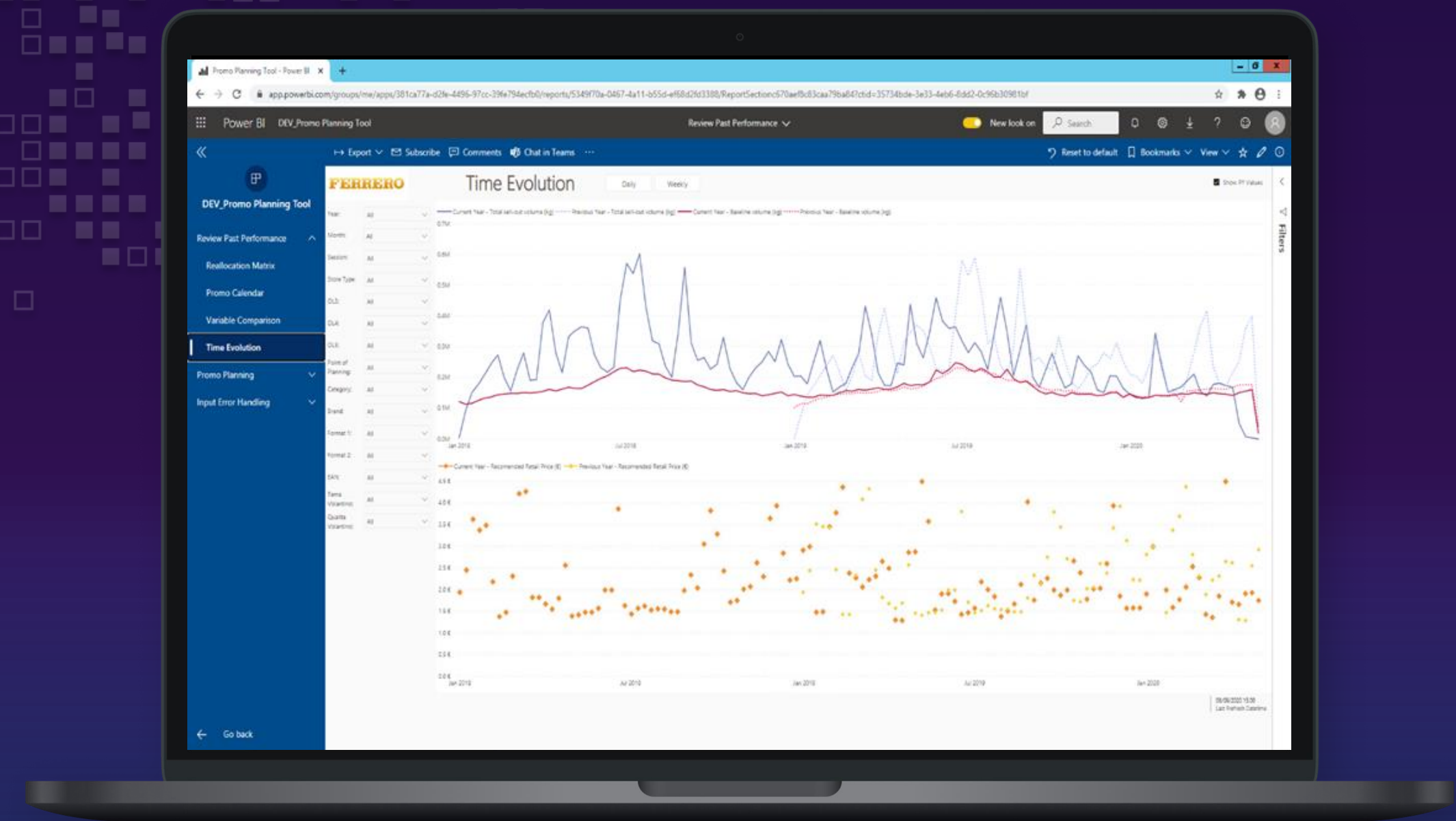
European manufacturer of branded chocolate and confectionery products has a challenge to align promotion activities with broader brand strategy and guidelines. Especially, it was important to have one tool for understanding of the historic campaigns performance and planning the timing of future campaigns.



## CASE 4

# SOLUTION

The SoftServe's designed solution used MS SQL stack (SSIS, MS SQL Server, T-SQL, SSAS) for automatic data ingestion, data storing and transformation and SSAS was used for creating OLAP-cubes. PowerBI and PowerApps are in the core of interactive planning interface that supports customer journey through analysis of past performance into future promo campaigns planning. The application allows to simulate key KPIs such as uplift, ROI, sell-in, sell-out, etc of planning promo campaigns and store results in analytical database



## CASE 4

# IMPACT



### Identify

more efficient and effective opportunities with promo funding  
(by product, brand, and tactic)



### Introduce

an interactive promo planning  
interface



### Create an analytical engine

to simulate key KPIs  
for future campaign events

# HOW WE CAN HELP AVOID KEY ISSUES OF AI ADOPTION



**Business value estimate**



**AI delivery efficiency**



**AI adoption**