AI driven Promotion & Forecast Optimization

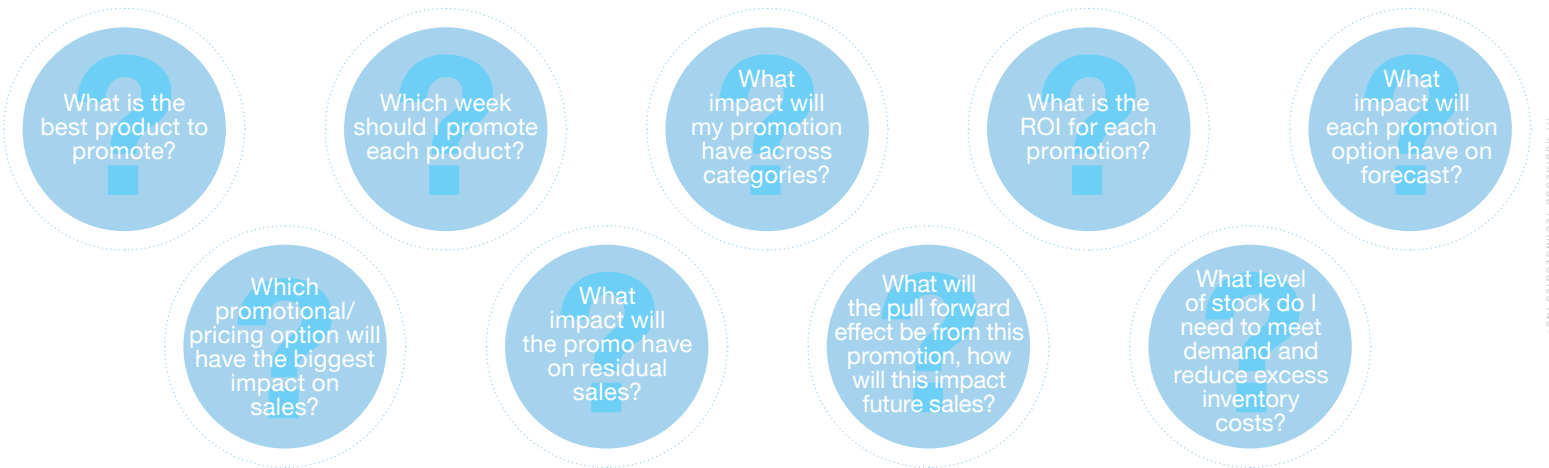Improved promotion performance drives Revenue Increase of:

3%-5%

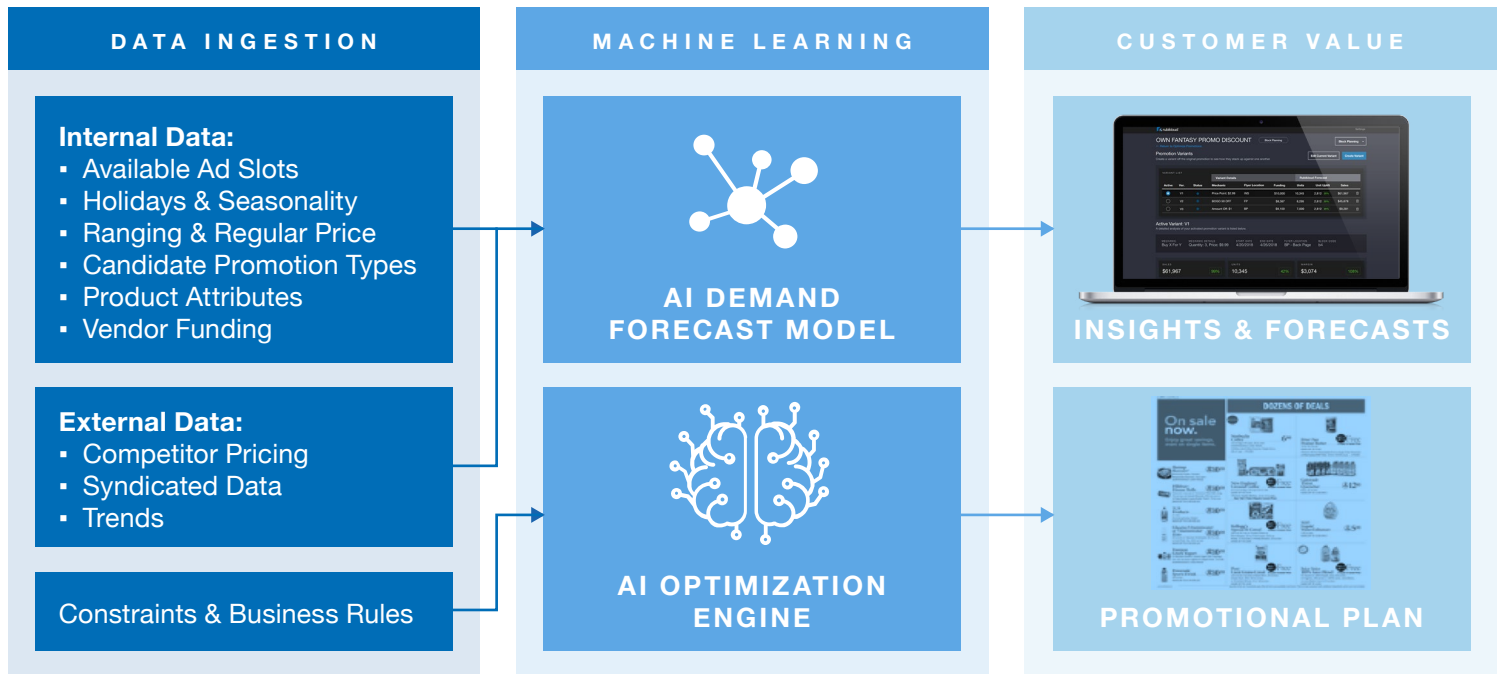Automation and touchless forecasts reduces planning time by:

50%

Excess Inventory costs and Missed Sales Opportunity through stockout reduced by

30%

WHAT QUESTIONS DO WE ANSWER FOR OUR RETAIL CUSTOMERS?

- What is the best product to promote?
- Which week should I promote each product?
- What impact will my promotion have across categories?
- What is the ROI for each promotion?
- What impact will each promotion option have on forecast?
- Which promotional/ pricing option will have the biggest impact on sales?
- What impact will the promo have on residual sales?
- What will the pull forward effect be from this promotion, how will this impact future sales?
- What level of stock do I need to meet demand and reduce excess inventory costs?

How ML drives optimized promotions and forecasts?

DATA INGESTION

Internal Data:
- Available Ad Slots
- Holidays & Seasonality
- Ranging & Regular Price
- Candidate Promotion Types
- Product Attributes
- Vendor Funding

External Data:
- Competitor Pricing
- Syndicated Data
- Trends

Constraints & Business Rules

MACHINE LEARNING

AI DEMAND FORECAST MODEL

AI OPTIMIZATION ENGINE

CUSTOMER VALUE

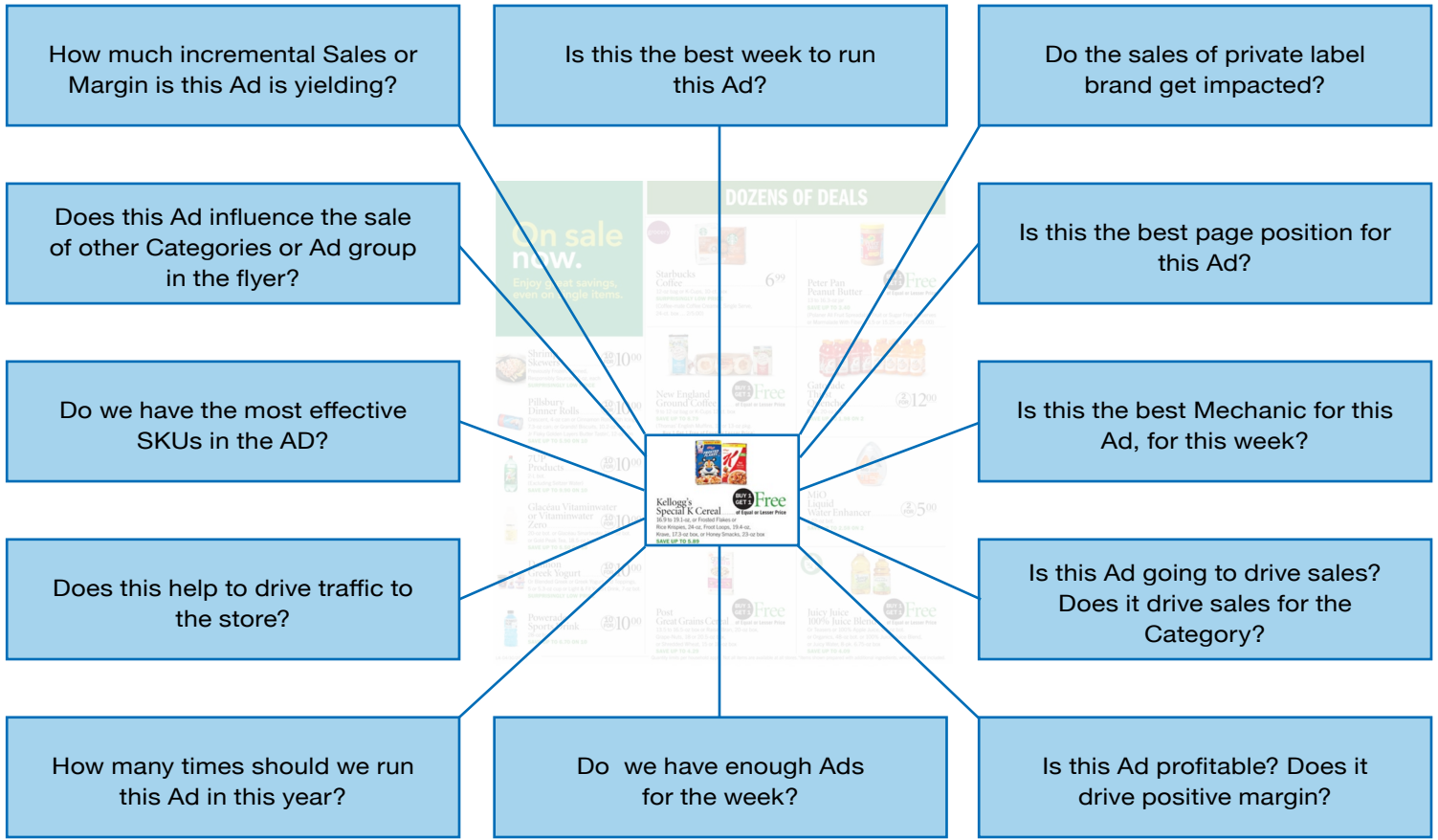INSIGHTS & FORECASTS

PROMOTIONAL PLAN

WHAT WAS THE CUSTOMER TRYING TO SOLVE:

Leverage Machine Learning to optimize weekly promotion planning at the strategic level in order to drive increased financial impact.

HOW WAS THE SOLUTION CONSTRUCTED:

Construct various candidate promotion calendar scenarios using Rubikloud's AI demand forecasting and constraint-based optimization engines on the Breakfast Foods category to drive financial improvement.

These were the types of questions our customer asked

How much incremental Sales or Margin is this Ad is yielding?

Is this the best week to run this Ad?

Do the sales of private label brand get impacted?

Does this Ad influence the sale of other Categories or Ad group in the flyer?

Is this the best page position for this Ad?

Do we have the most effective SKUs in the AD?

Is this the best Mechanic for this Ad, for this week?

Does this help to drive traffic to the store?

Is this Ad going to drive sales? Does it drive sales for the Category?

How many times should we run this Ad in this year?

Do we have enough Ads for the week?

Is this Ad profitable? Does it drive positive margin?

WHAT RUBIKLOUD GENERATED/DELIVERED:

$2\text{\textasciicircum}170\times5\times26\times6=1.17E54$
SKU COMBINATIONS WITHOUT CONSTRAINTS

15+
UNIQUE BUSINESS RULES USED

4,200
UNIQUE SCENARIOS ACROSS AD-GROUP MECHANICS ETC.

8
PROMOTION PLANS PRODUCED

10,377,921
FORECAST POSSIBILITIES

KEY RESULTS:

30%
Higher Incremental Sales for items selected in optimal plan

14%
Decrease in distinct items promoted
(SKU rationalization)

45%
Incremental $ per item