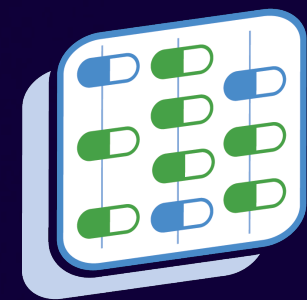


Leveraging AI-Powered Analytics for Pharma Brand Performance



PMSA
PHARMACEUTICAL MANAGEMENT
SCIENCE ASSOCIATION



Alvin Wong
Director of Marketing
Tellus



Nick Pinero
Director of Solutions Architecture
Tellus

What Is Tellius?

Enabling faster decisions with better understanding of 'what' and 'why' from business data using AI-Powered Insights

Trusted by Innovative Global Brands

Finance & Insurance

homepoint



Pharmaceutical

NOVARTIS

IQVIA™

CPG

PEPSICO

DIAGEO

Telecom & ICT

NOKIA

DETSAD

Media & Comms

INTOUCH SOLUTIONS

Pelmorex Corp

Technology

Teletrac Navman

inhabitIQ

Partners



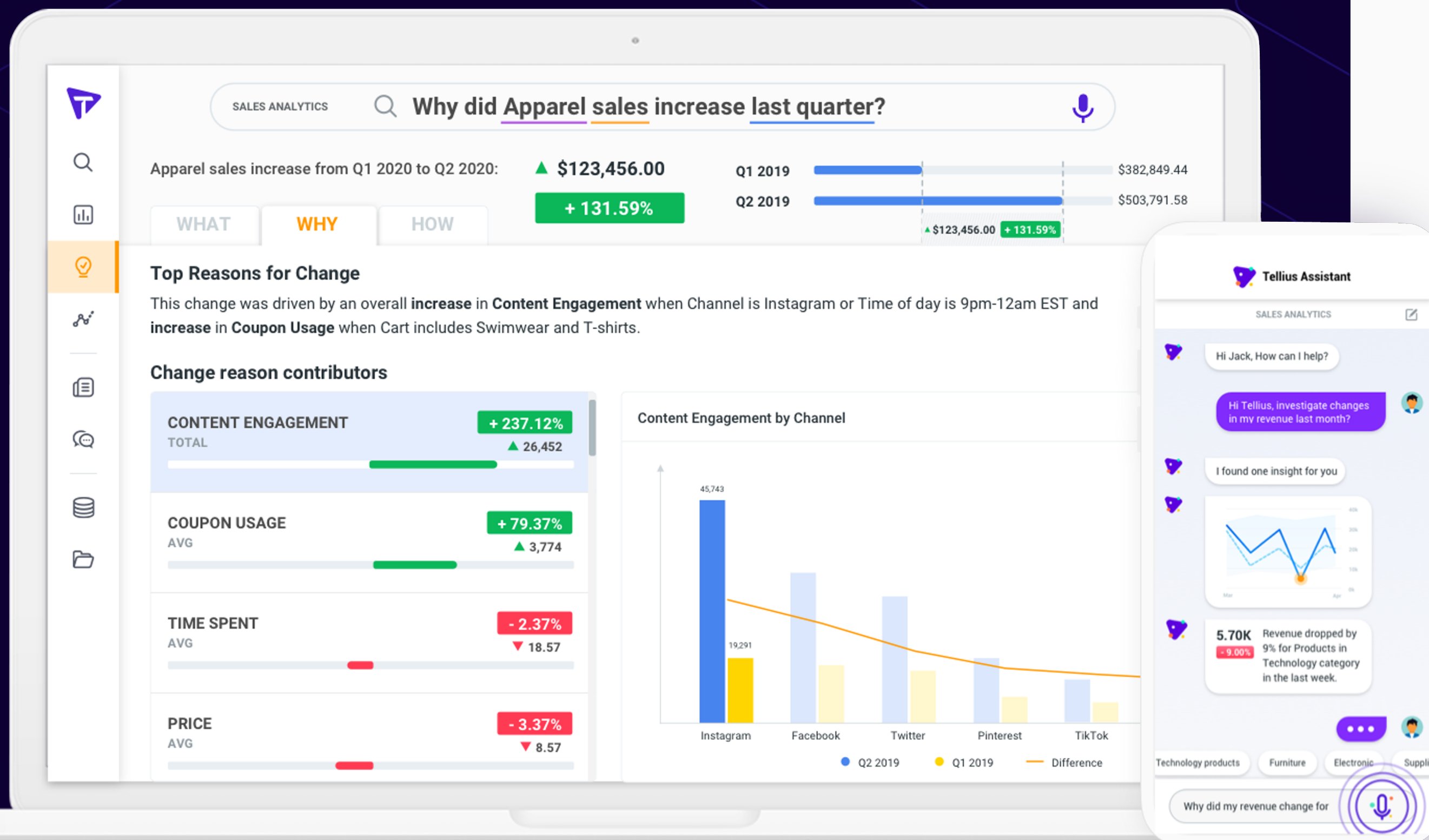
databricks

Looker



Google Cloud

snowflake

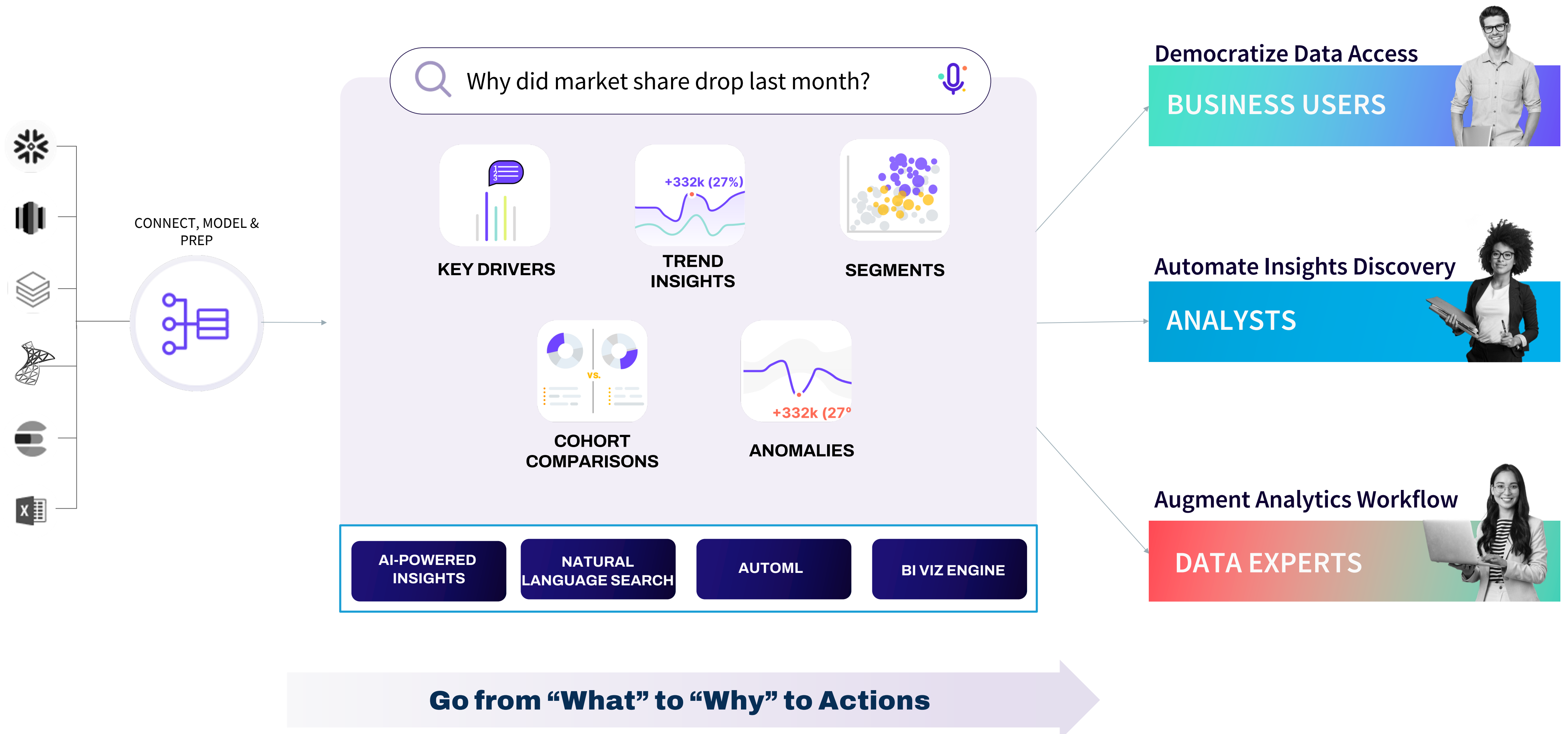


Commercial & Brand Performance Insights

- How has our brand performed against competitors over time?
- Why has market share changed in specific channels & regions?
- How do we direct the sales team to the best opportunities?

 **How can AI-Powered Analytics help uncover new opportunities from third-party & internal data?**

Impact of AI-Powered Analytics



Augment Your Analytics Workflow

Seamlessly move from 'What' to 'Why' to 'How' with augmented intelligence

Why did **Entruvica** market share in the Northeast drop **last month**?



1 WHAT CHANGED?

Significant contributors to changes

Sales change contributor details

Market Share in Pennsylvania decreased by 3.23% which impacted 23.85% of the total change.

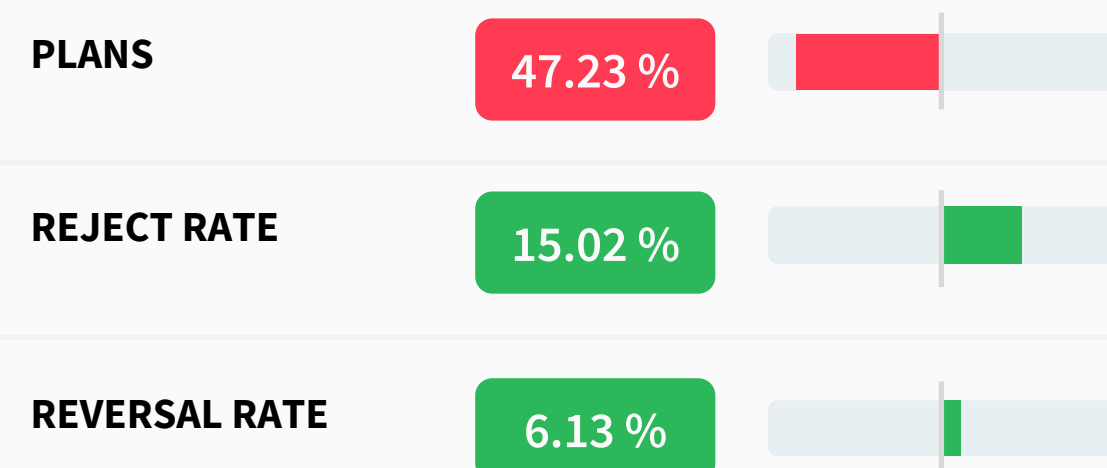


2 WHY METRICS CHANGED?

Root cause analysis

Change reason contributors

Change was driven by an overall increase in reject and reversal rates for employee plans and loss in formulary position across Caremark.



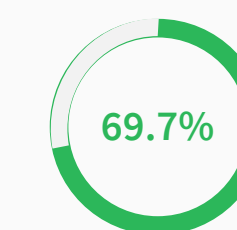
3 HOW TO IMPROVE?

Segments to drive outcomes

Targeted HCP segments

Underperformance is 13.5x more likely when HCPs meet these criteria.

13.5 x



STATE is "Pennsylvania"

PLAN TYPE is "Employee"

PLAN TYPE is between 48% and 57%

REJECT RATE is > 32%

Segment S1
13.5 x

Segment S2
12.3 x

Segment S3
7.9 x

Segment S4
4.1 x

Smart Frameworks for Pharma & Life Sciences

 **Symphony Health**
A PRAHEALTHSCIENCES COMPANY

 **IQVIA**

Model N Chargebacks



Formulary / DRG



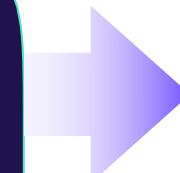
Invoices / Claims



Call Planning,
Targeting, Alignment



Easy Access to Data for Business Teams

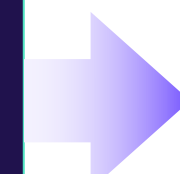


MARKET ACCESS

Optimize investment in Market Access and inform pull through strategy

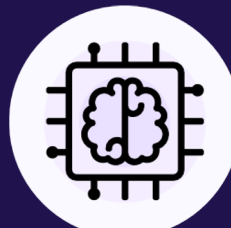


Proactive Anomaly Detection



REBATE OPERATIONS

Streamline review and identify millions in rebate savings annually



Next Best Prescriber & Cash Flow Predictions



COMMERCIAL

Identify more growth opportunities and automate brand performance deep dive



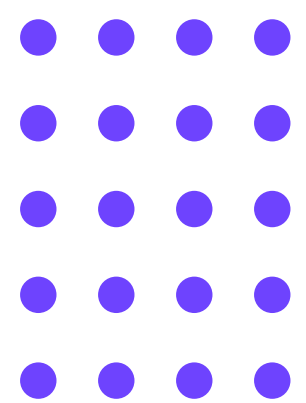
Market Share Insights for Tracking Competitive Landscape



SUPPLY CHAIN & QUALITY

Reduce analysis time significantly and identify bottlenecks in Quality Process Cycle



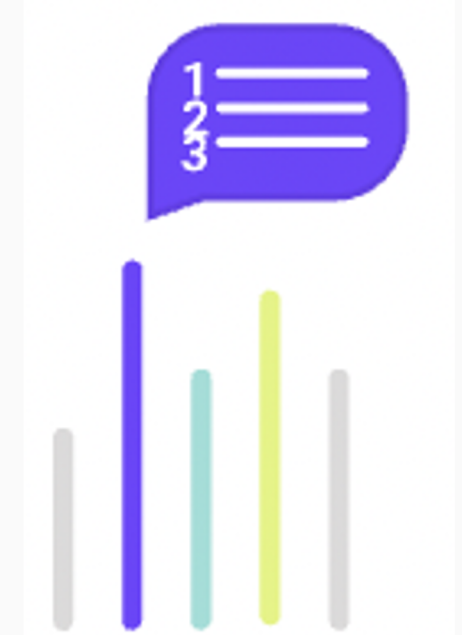


Commercial Performance

| | |
|----------------------|--|
| INTERNAL DATA | > Sales Activity/ Calls > Call Planning, Targeting |
| EXTERNAL DATA |  Symphony Health A PRAHEALTHSCIENCES COMPANY  |

PERFORMANCE DRIVERS

Perform diagnostics to uncover the key drivers of a brand's commercial performance



SALES FORCE EFFECTIVENESS

ML-driven approach to generating HCP target list to maximize salesforce productivity

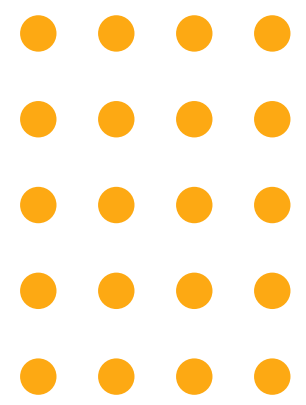


MARKET SHARE INSIGHTS

Proactively identify trend breaks in market share to enable brand teams to course correct



INCREASE MARKET SHARE



Market Access

| | |
|----------------------|---|
| INTERNAL DATA | Formulary/ Target List |
| EXTERNAL DATA |  Symphony Health <small>A PRAHEALTHSCIENCES COMPANY</small>  |

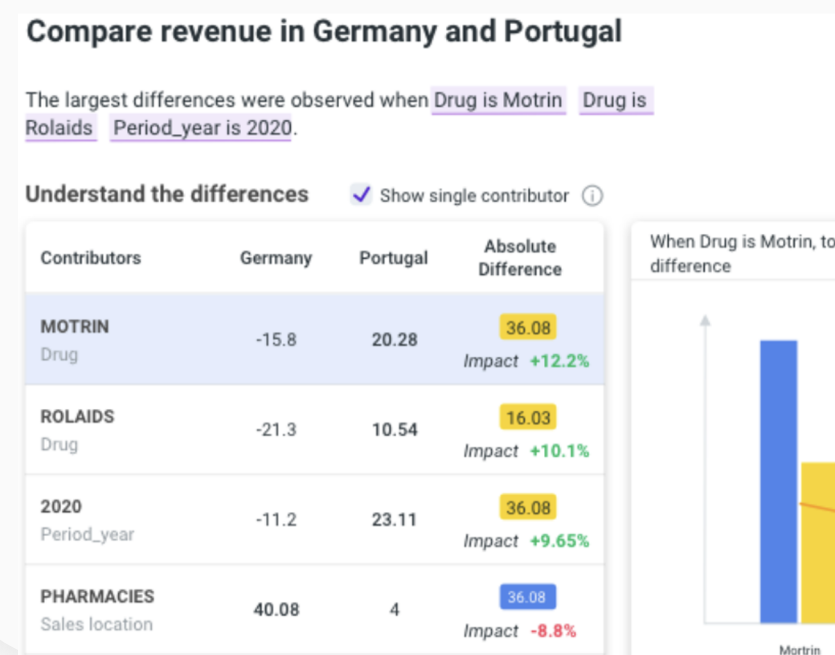
PREDICT IMPACT OF ACCESS CHANGES

Inform contract discussions based on leveraging ML to understand impact of access changes across payers



FORMULARY MONITORING

Real-time monitoring into access changes and brand performance

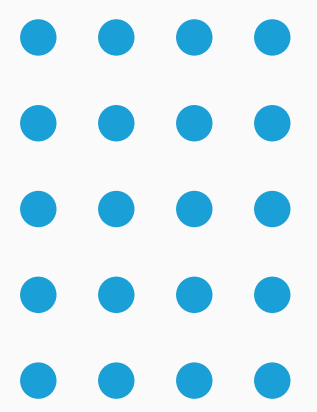


GENERATE HCP TARGET LIST

Combine performance and formulary data to identify favorable access segments with growth opportunities



OPTIMIZE INVESTMENTS

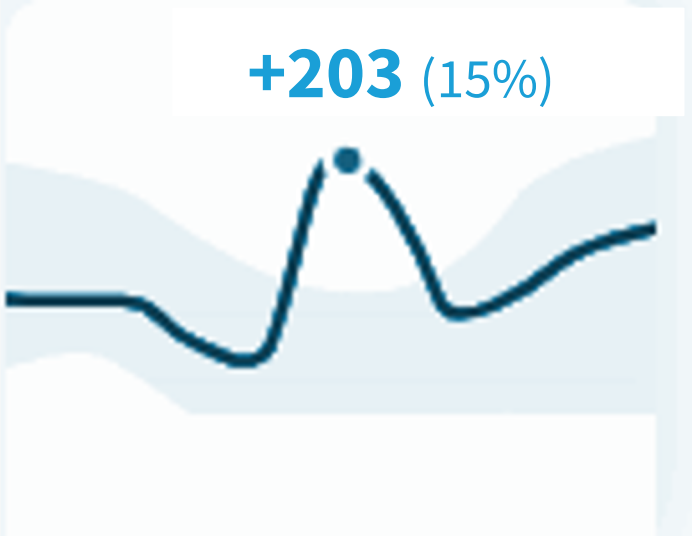


Rebate Operations

| | |
|---------------|---|
| INTERNAL DATA | Claims data |
| EXTERNAL DATA |  Symphony Health A PRAXIS HEALTH SCIENCES COMPANY |
| |  |

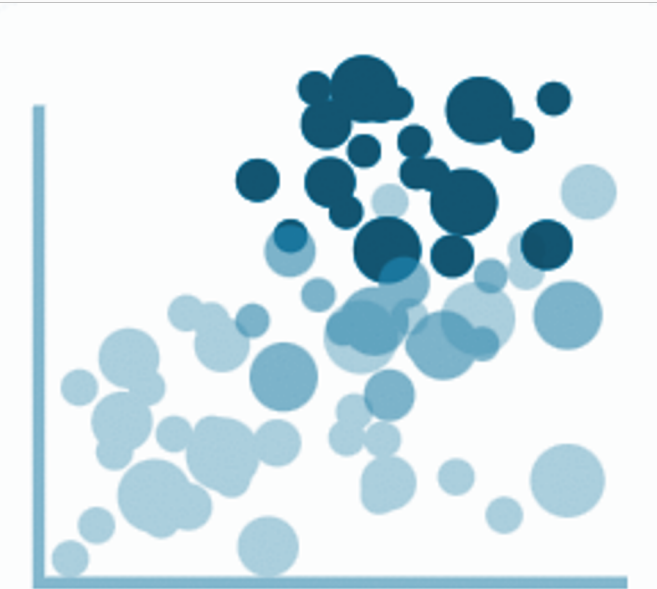
REBATE UTILIZATION TRACKING

- Real-time alerts on shifts in rebate utilization
- Trend-based insights into areas with highest variance



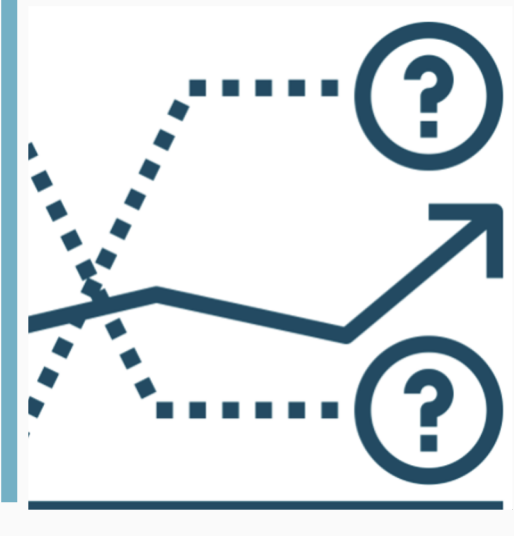
FORMULARY & PLAN-LEVEL PERFORMANCE

- Analyze plan level performance and identify under/over performers
- Automate rebate reviews



REBATE & CASHFLOW FORECASTING

- Cash flow and submission date predictions
- Real-time alerts into larger than usual resubmission



IDENTIFY \$\$\$ IN REBATE SAVINGS

HCP Targeting Case Study

Background

Schema: claim-level data that was aggregated to HCP level

Market: US market

Data Sources: behavioural attributes

- 3rd Party monthly claims
- Sales Activity / Calls
- Procedures, Diagnoses

Join Key: int/ext sources joined by NPI/HCP ID.

Challenge

- A rare cancer treatment—recently gained FDA approval.
- Commercializing this multi-million dollar investment is top priority.
- Identifying eligible patients involves manual analysis of 3rd party prescription data to generate a list of potential prescribers & patients. Company lacks data scientists on the sales operations side.

Solution

- Company's Commercial Operations & Analytics team engaged Tellus to augment prescriber identification.
- Integrated/unified Company's disparate data — clinical, regulatory, quality, safety, medical, commercial (e.g. Viva Nitro), and 3rd party prescription data from IQVIA/ Symphony.
- A target prescriber ML model was built and trained on the unified data to identify top characteristics/segments of writers.

Impact

- **Identified 30% new sales opportunities** converting at **~10%** (beating McKinsey baseline) resulting in a forecasted **multi-million \$ revenue boost**.
- Enabled commercial teams with **faster and easier creation of prescriber segments using ML modeling techniques** without hiring data scientists and **boosted sales efficacy** via engagement prioritization.
- **20x faster processing** using scalable in-memory architecture vs. Excel and traditional databases.
- **~98% faster generation of insights** - 96 hours using Tableau, Excel, Python/R reduced to minutes.
- **4x faster to prep data** for ML and train models as compared to Python/R.



Goal: Improve Brand Performance

WHAT

Data exploration/discovery through natural language search

- Has there been any recovery in market (COVID)?
- How is brand performing as compared to competitors?
- Which territories are underperforming?

WHY

Automating discovery of deeper insights

- Where has competitor's market share increased?
- Why is competitor outperforming our brand?

HOW

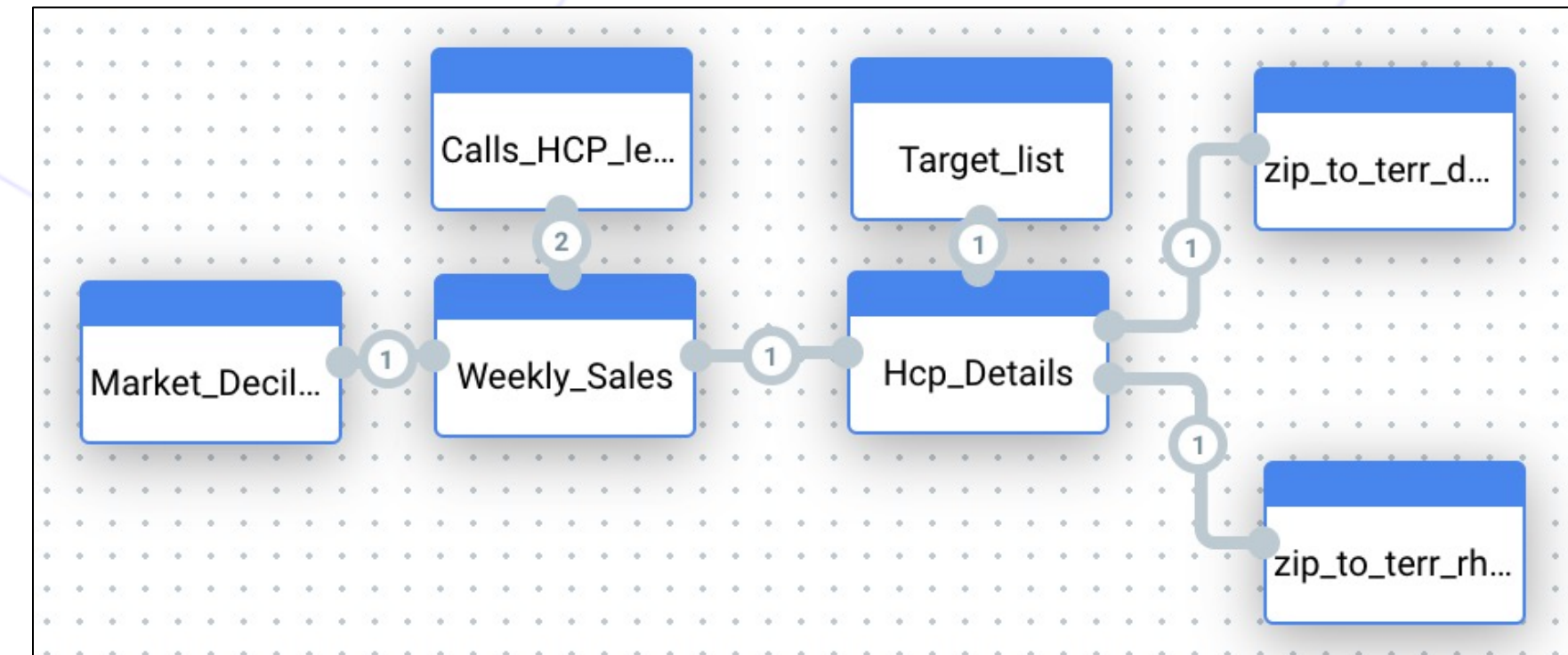
Create a refined targeting list to identify

- Underperforming sales reps
- Areas field should allocate more resources
- Underperforming HCPs w/ high opportunity



Live Case Study

- **Data:**
 - Prescription-level data
- **Sources:**
 - Internal Data
 - 3rd Party Data (IMS, Plantrak, APLD, Xponent)
- **Attributes:**
 - Sales Activity / Calls
 - Call Planning, Targeting, Alignment
 - Prescription activity
 - HCP details
 - Plan-level info



| a HCP_ID | a Product | a Specialty | a Indication | 📅 date | # TRx | # NRx |
|------------------|------------------|--------------------|---------------------|---------------|--------------|--------------|
| String | String | String | String | Date | Integer | Integer |
| ID-14613877-E... | MYCOBUTIN | RHEUMATOLO... | PSA | 2020-03-03 | 0 | 0 |
| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | OTH | 2020-06-16 | 0 | 0 |
| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | OTH | 2020-03-17 | 0 | 0 |
| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | PSA | 2020-06-23 | 0 | 0 |
| ID-14613877-E... | MYCOBUTIN | RHEUMATOLO... | PSA | 2020-05-26 | 0 | 0 |
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| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | PSA | 2020-02-04 | 2 | 1 |
| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | PSA | 2020-03-24 | 2 | 2 |
| ID-14613877-E... | MYCOBUTIN | RHEUMATOLO... | PSA | 2020-06-02 | 1 | 1 |
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| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | PSA | 2020-01-14 | 0 | 0 |
| ID-10272729-E... | ENTRUVICA | RHEUMATOLO... | OTH | 2020-02-04 | 0 | 0 |





Summary

WHAT

- ✓ Stendra's market share increased among new patient starts
- ✓ Market recovery post-COVID

WHY

- ✓ Stendra had significant growth amount in ST and T2 targets
- ✓ Market Share increased in largest Derm market
- ✓ Low-writing HCPs contributed to growth
- ✓ New cluster of growers in Arkansas and Georgia

HOW

- ✓ Allocate more resources in targeting ST and T2 writers in Atlanta North and Memphis territories to help capture growth
- ✓ Incorporate formulary data, ensuring HCPs with high coverage are targeted



Q & A