

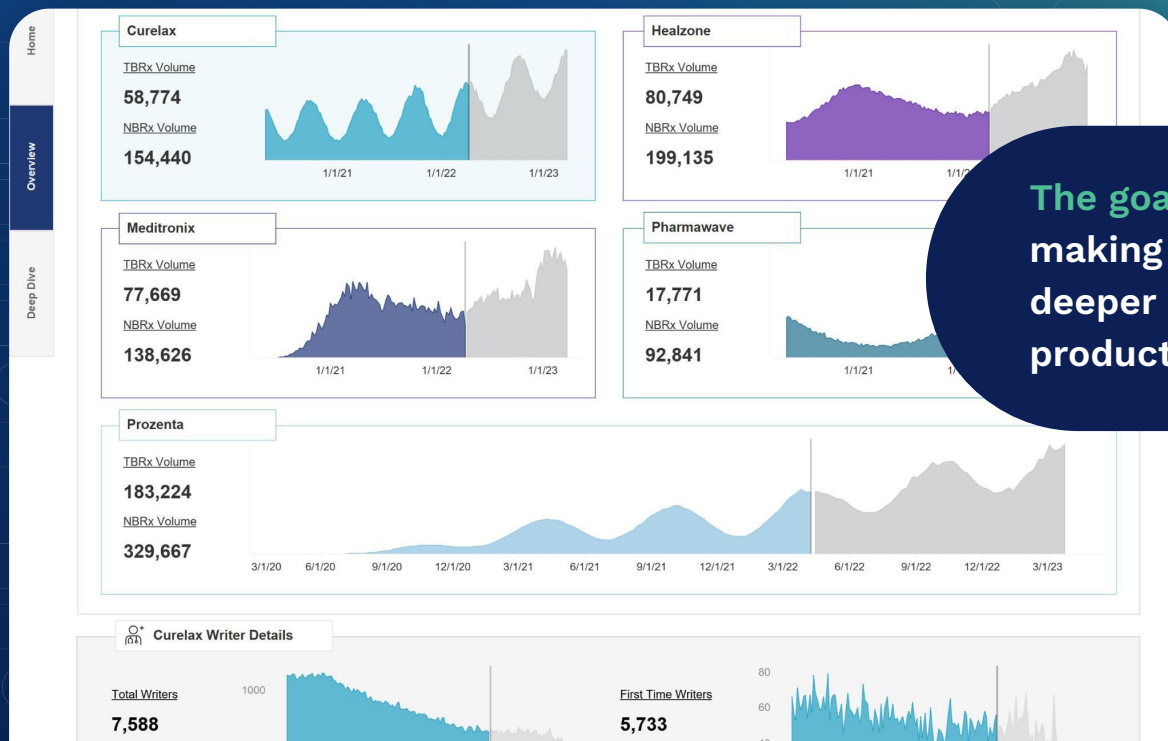


Using Predictive Analytics to Forecast Sales

Healthcare Use Case



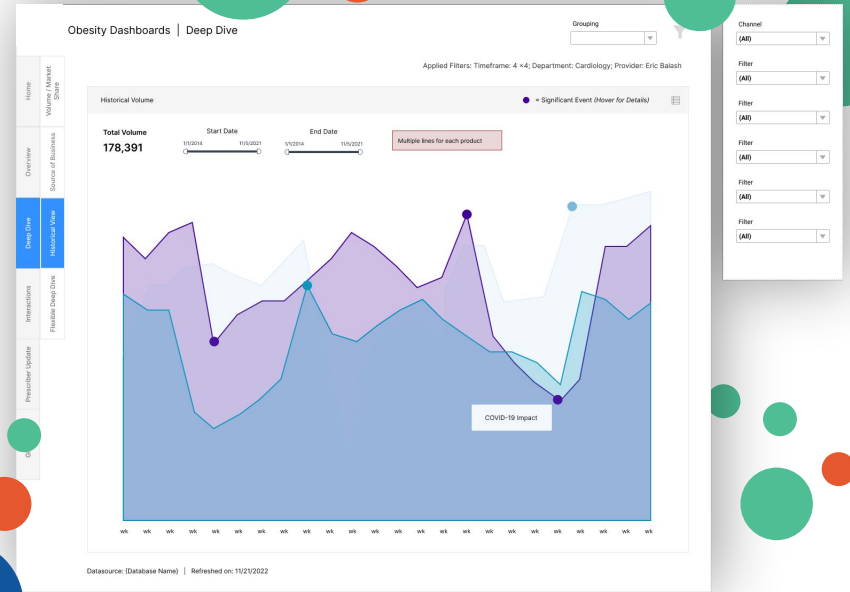
A multinational pharmaceutical company needs to develop a set of Tableau dashboards.



The goal: drive decision-making and develop deeper insights into product sales.

The Problem: Insufficient Projections, Missed Opportunities

Pharmaceutical companies often find that a lack of detailed, accurate sales forecasting creates business inefficiencies and an inability to fully realize potential in investment, manufacturing, supply chain, marketing, sales, and other areas.



The Problem:

Insufficient Projections, Missed Opportunities



Misalignment of supply needs and future demand,

which increases inefficiencies in production and distribution and decreases cost savings.



Lack of visibility

into opportunities and risks in new markets and/or with existing prescribers.



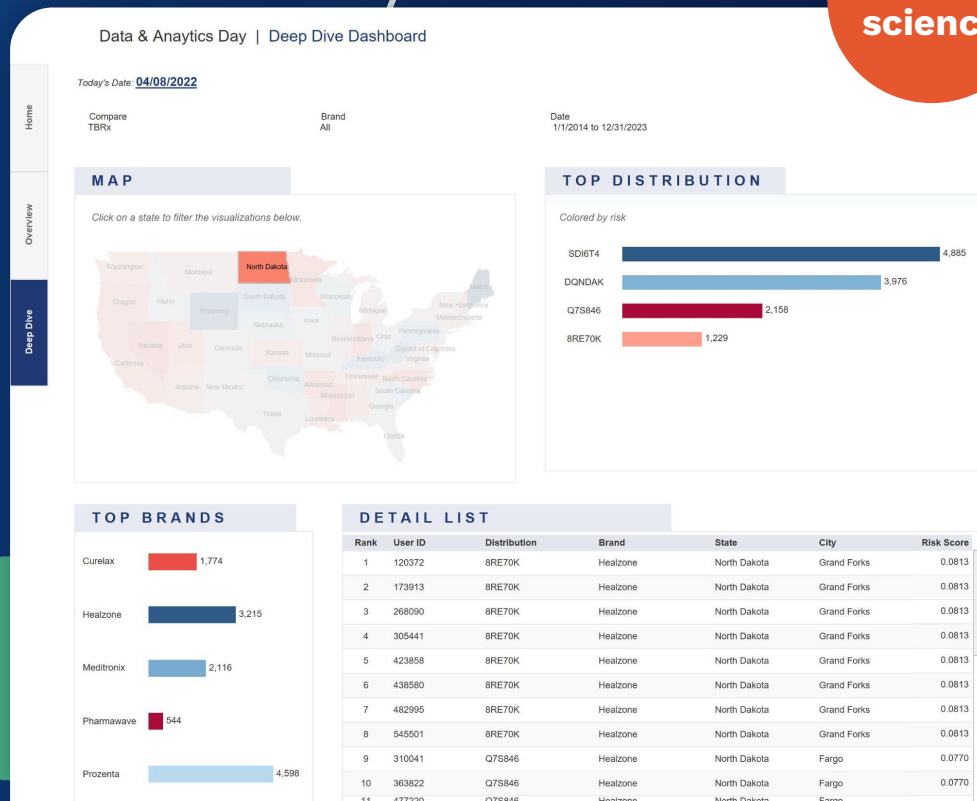
Difficulty identifying key sales drivers

across areas like seasonality, promotions, and marketing campaigns.

The Solution: Predictive Analytics for Sales Forecasting

Lovelytics can implement data science, engineering, and visualization capabilities to expand upon a company's current descriptive analytics, and provide a **cohesive picture of sales** in the past, the present, and the future.

data
science



The Solution: Predictive Analytics for Sales Forecasting



Implement data science and machine learning alongside historical data to proactively identify changes in the landscape that can suggest changes to the forecast in near real time.



Provide customer-level insights to facilitate active relationship management with prescribers.



Democratize insights provided by machine learning, leveraging a Tableau format that can be utilized across the organization for more proactive action.

A Closer Look

The Biggest Challenges

High level projections, even if accurate, may not be **actionable**.

Specific user patterns can be **too erratic** to be predicted based upon only internal data.

Creating a unique model for each customer can be **costly**.

The Answer

Integrate individual customer data in pools while keeping track of their individual contribution to the pool.

The Ingredients

Data

All historical sales data, including by product and prescriber data

Platforms

- Integration of Databricks Lakehouse and Tableau
- Data visualizations in Table Desktop leveraging similar layout, look, and feel of existing sales reporting

Tools

- Trained Time Series learning model, developed and managed in Databricks Lakehouse
- Databricks Lakehouse ML Ops features to manage models and track accuracy

The Secret Weapon: Databricks

Power your data with the Databricks lakehouse Platform. You're data could include ~20M rows of data, ~100k users, ~400 districts and the lakehouse provides a solution that is both customizable and scalable.

Customizable

- Insights can be easily tailored to add new visualizations and other customizations.
- The solution can be extended to meet specific client needs, such as finely tuned models for specific customers or regions.

Scalable

- Training can be conducted with millions of rows of data across thousands of users across multiple locations.
- Horizontal scaling can make ML models extensible beyond this limit.

~20M
rows of
data

~100k
users

~400
districts

Conclusion:

Existing Technologies Can Boost Sales Capabilities

By leveraging and expanding upon existing technologies and investments, Lovelytics can enable pharmaceutical companies to:

- Arm leaders with more sales and prescriber insights, developed through Tableau visualizations
- Gain a deeper understanding of key sales drivers
- Identify opportunities and risks for existing products and new offerings

