



Solution Sheet

Life Sciences Commercial Data Platform



Industry Pressure



COVID-19 has put a permanent impact on the way the commercial organizations of pharma, biotech and med devices organizations operate. The processes for brand launches have changed significantly. With in-person access to healthcare professionals significantly reduced, marketers need to seamlessly orchestrate messaging across a wide array of digital channels in combination with personal channels. Sales and Marketing (commercial organization) teams need to dynamically change their strategy and execution based on learning loops leveraging local insights.

Commercial organizations heavily rely on analytics to strategize their brand launches and effectively drive their sales and marketing outreach. To be more effective and efficient, sales and marketing teams need real time access to a wide array of data sets at a much granular level to drive more effective segmentation and personalization strategies as they reach out to target healthcare professionals and

healthcare organizations. With payer organizations playing a much more pivotal role and direct patient outreach being an integral part of the commercial strategy, the need for a robust, highly scalable data ecosystem is the need of the day.

Unfortunately, the data ecosystem of most organizations is not geared to support such needs.

Listed below are typical challenges observed with most organizations:



Data Processing

- Extended processing cycle that hinders agile business decision-making.
- Outdated and non-scalable infrastructure / platforms can no longer keep up with evolving complex business / data needs.
- Inability to quickly integrate new data sources for driving innovation.



Data Quality

- Lack of trust in the data released as part of reports — in multiple occasions business team is exposed to errors in data processing.
- Multiple versions of truth, due to inconsistency in business rules across different reports in different systems.



Visualization and Consumption

- Lack of visual design best practices in the dashboards and reports.
- Too many KPIs and performance challenges.
- No self-service reporting platform.
- No formal data lab environment available to business users that allows them to carry out data experimentation.



Governance and Execution

- Lack of available capacity to respond to extensive use of data easily and quickly by various business teams.
- Proliferation of siloed business solutions which adds unnecessary additional cost overhead in terms of development and ongoing support.

Business Impact

Access to a next generation data ecosystem can help the Commercial Analytics teams make significant business impact. Outlined below are some examples of effectiveness and efficiency improvement enabled through a superior data ecosystem:

- Speed and agility** in business decisions pertaining to brand launches and changes in promotional spend on channels based on real-time data.
- Dynamic change** to strategy and execution based on learning loops leveraging local insights.
- Seamless orchestration** of brand messaging across multiple channels driving omnichannel effectiveness.
- Personalized engagement** with both physicians and patients based on customer **micro-segments**.
- Ability to drive **patient and payer insights** from **wide variety of data** like syndicated sales data, claims data, longitudinal patient data, internal sales data, and social media data.

To meet the above business imperatives there is a need to have a Next-Gen Cloud based Data and Analytics solution that is purpose built to meet the Commercial Analytics needs. Such a system will enable the following:

1\ Faster Time to Market and Consumption

- Enable publication of syndicated sales data (from external data providers like IQVIA) as soon as they are made available rather than waiting for weekends
- Enable access to new stand-alone data sources in couple of days in place of current lag time of 2+ weeks
- Enable self-service for data scientist to carry out data ingestion and analysis (to be driven by data governance policies)
- Accelerated access of data to the business community (average lead time post data ingestion — one hour)

2\ Advanced User Experience

- Role based reporting and insights delivery to prevent information overload
- Ability for end users to easily scan and search KPIs and metrics without help of analysts

- Single integrated platform where end users can get answers to all their questions

3\ Error Free Data & Insights Delivered Consistently

- Process for certifying data made available through “Information Portal” layer with SLAs guaranteeing >99% accuracy
- First response to all data queries within a day (less than 24 hrs.)

4\ Modular and Future Proof

- Solution can be easily extended to other business divisions or geos with minimal additional cost
- Easily integrate with wide variety of front-end tools and domain specific AI / ML libraries

5\ Governance and Execution

- Well defined governance framework and processes that can be extended globally

Why this solution?

Persistent, Celero and Snowflake built an agile, scalable and purpose-built data platform that will enable commercial leadership to seamlessly launch a brand and enable data driven decisions that will ensure the positive impact of the brand in the marketplace.

Key Highlights of the Platform

- Pre-built, end to end data model, KPIs and reports that will need minimum configuration and customizations
- Core modules associated with data ingestion and processing that can adapt to the changes in the source data model very quickly
- End to end deployment in < 8 weeks
- Minimal development effort for implementing a new analytical model with ability to go down at max granular level
- Inbuilt ability to extend the data model to accommodate unique customer needs

The diagram below provides a high-level illustration of various data products, KPIs and metrics that the platform is ready with:



The key aspects of the platform are as follows:

Data Ingestion and Management	Data Curation and Modeling	BI and Advanced Analytics
<ul style="list-style-type: none">\ Connectors and parser templates for dynamic ingestion\ Polyglot data storage capability\ AI enabled DQ framework\ Fast access zone for data exploration	<ul style="list-style-type: none">\ Data catalog with meta data management and data governance\ AI enabled data enrichment capability\ Out of the box configurable environments for ML ops and data sharing	<ul style="list-style-type: none">\ Ease of deployment of models and integration with BI tools\ No code ML to deliver one-touch analytics capability to the business users\ Search BI capability for ad hoc reporting

Our solution guarantees improvement in **time to market for analytics projects; quality of data in reports** and driving overall **TCO reduction**. The key Benefits of our solution are:

- 1\ End of data silos**
Easy access to all requisite data sets at a single place
- 2\ End to end data governance**
From data ingestion to consumption, integrated metadata and governance of the data
- 3\ Self-service enablement for end users**
Cataloging, wrangling, provisioning, integration with BI tools to enable self-service for data consumers
- 4\ Assurance to data quality**
Ability to provide high quality data sets leveraging AI ML based data quality framework
- 5\ Support to advanced analytics use cases**
MLOps enablement and access to next gen use cases

Why Celero, Persistent and Snowflake



Celero Commercial Solutions provides **unique** and **purpose built solutions** and services to its customers. Celero's **See data platform** is currently leveraged by more than 500 sales representatives in the industry across several life science customers in North America.




Persistent has over **30 years of experience** in building products and solutions in the data and analytics space. Persistent enjoys a 360-degree relationship with Snowflake. Persistent offers Snowflake implementations and migrations to the enterprises. Persistent has developed its own platform on Snowflake called **Persistent Data Foundry**. Persistent offers product integrations with Snowflake and also runs Snowflake's Tech Partner Validation lab.

In addition, Persistent is the **Engineering & DevOps partner of choice** for Celero and has been an integral part of building and supporting Celero services. Persistent has been working with global biopharmaceutical and medical devices companies and has created a deep domain understanding of the space along with several pre-built components that can significantly fast track such developments.



Celero and Persistent have leveraged Snowflake's industry leading cloud data platform for high performance data analytics to come up with the **next-gen commercial data model** for pharma, biotech and med device companies. The solution leverages its ability to process structured and semi-structured data and manage multi-variate workloads. Snowflake's storage-compute separation and compute-compute separation is used in **creating multi-tenant architecture** that keeps the customer's size and use cases at the center. The development features like zero-copy clone and time travel are used for **fast-track implementation** while data sharing features are leveraged for **data monetization**.



Understanding the most optimal channel to reach a physician is key to delivering effective product messages. Celero and Persistent delivered a purpose-built Snowflake managed services platform that delivered key insights that informed our selling strategy.

Stanley Braxton, SVP Commercial Operations, Ashfield Healthcare, Inc

Case Study

Ashfield, is a **leading contract sales** and digital enablement **organization** and provides services to a wide array of pharma and biotech companies. As a services organization they deal with complex data sets and strive to provide value to its customers. Data exploitation (not technology) and analytics offers a significant market differentiation for Ashfield. Simply put **Data exploitation translates to winning customers.**

Ashfield professional services team needed an end to end data management and reporting platform which they could leverage to quickly onboard customers having both internal and external data sets and enable their sales teams with latest updates on sales performance.

The Solution

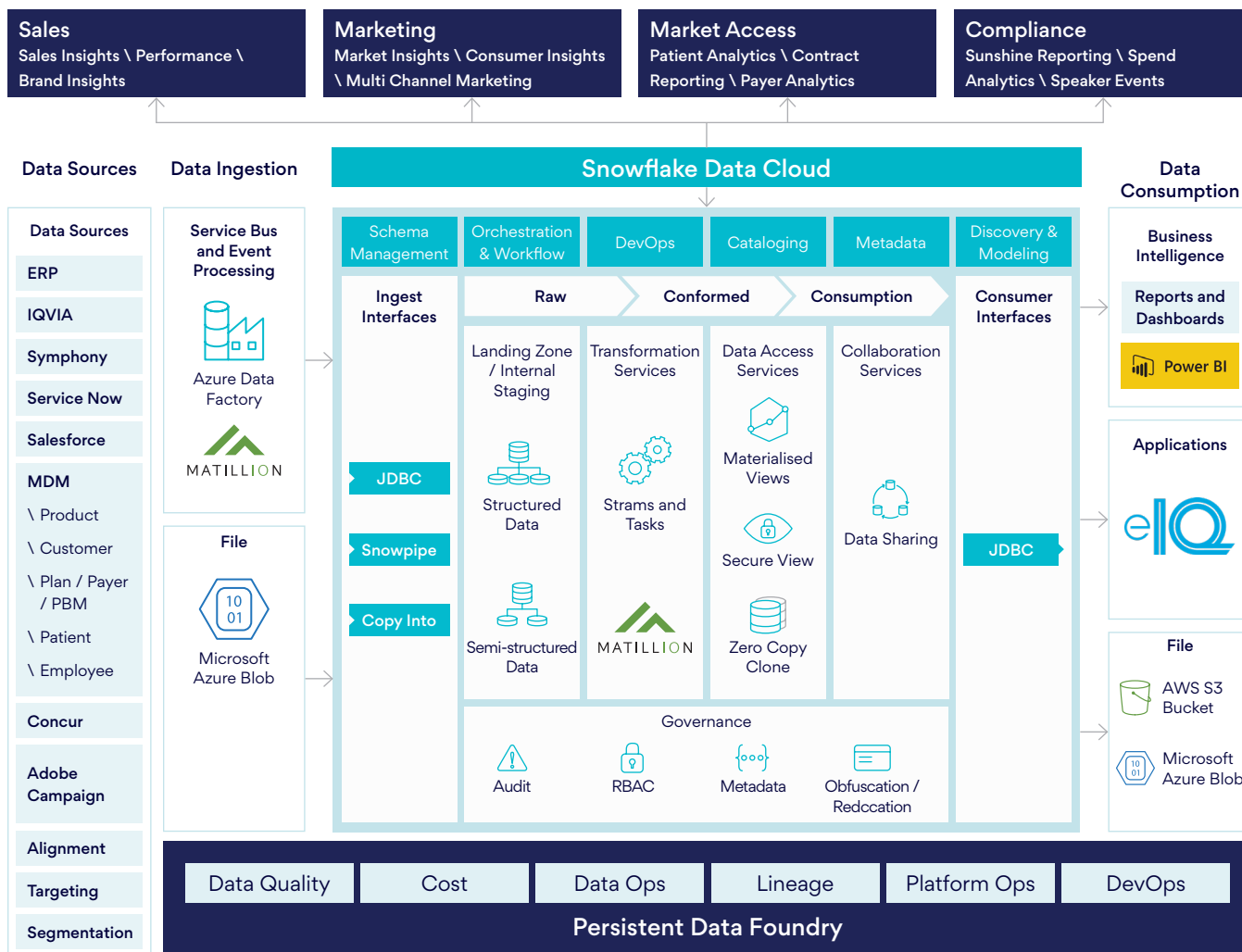
Persistent and Celero deployed an end-to-end commercial data platform using Snowflake and PowerBI.

Data sourced and aggregated in real-time to both push and pull reporting framework using Microsoft's PowerBI platform.

The solution was able to **ingest data from a wide array of sources** including syndicated sources such as IQVIA, internal sources such as Veeva CRM and ERP platform and various other digital sources. The

solution covered **360 degree metrics** for healthcare professionals (HCP) and healthcare organizations (HCO) as required to be assessed by the sales teams and has more than **100 pre-built KPIs** which can be accessed in the form of dashboards and reports by various stakeholders. The solution also readily **feeds into different downstream systems.**

Reference Architecture



Outcomes

Working with Snowflake, Persistent and Celero, Ashfield was able to exploit and monetize its data to increase customer acquisitions and establish

itself as a market leader in offering customer centric solutions. Some of the key benefits of the solution are as follows:

- Time to Insights: Accelerated access of data** to the business stakeholders **significantly** including near real time access to data sets based on business needs.
- Reduction in Total Cost of Ownership:** Ashfield was able to operate the modern data platform at **30% lower TCO** than the traditional system.

- Simplicity and Efficiency:** Easy to deploy and operate. Solution is pre-built with the ability to **integrate data** from most likely data sources requiring **no additional cost or time**. Easily available **pre-configured reports**.
- Externalization:** Ability to **easily live share data** with external partners as required.

Interested in learning more about how Snowflake, Persistent and Celero can help you manage your Life Science Commercial Data, Analytics and Reporting Platform? Connect to Persistent and Celero representatives to book your 20-minute demo.

[Learn more](#)

About Persistent

With over 15,000 employees around the world, Persistent Systems (BSE & NSE: PERSISTENT) is a global services and solutions company delivering Digital Engineering and Enterprise Modernization. Uniquely combining technology innovation with process transformation, we drive transformational programs with industry leaders to deliver patient-centric care.

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