TABLE OF CONTENTS

3 Industry Challenges Are Driving the Need for a Data-Driven Commercial Strategy
4 6 Best Practices for Building a Data-Driven Commercial Strategy
5 Break down data silos
7 Customer Story: Pfizer
8 Customer Story: Novartis
9 Customer Story: IQVIA
10 Snowflake enables improved data-driven commercial strategies
11 About Snowflake
INDUSTRY CHALLENGES ARE DRIVING THE NEED FOR A DATA-DRIVEN COMMERCIAL STRATEGY

A rapidly changing market landscape is keeping life sciences companies on their toes, making it critical for them to regularly evaluate their strategies and effectiveness. Meanwhile, new challenges for industry marketers have emerged, underscoring the importance of data-driven approaches across the commercial operations value chain.

Many factors are fueling demand for data-first commercial strategies, such as increased competition and significant industry consolidation, which are forcing companies to bring drugs to market faster and implement commercialization strategies earlier in the product development process. Facing an increase in generic options and biosimilars, as well as merger and acquisition activity that could reach $400 billion in 2022, there is greater urgency than ever for life sciences companies to innovate and drive efficiency.

Life sciences companies must also navigate global supply chain issues and political pressures to reduce drug costs and innovate pharmaceuticals. In 2021, the 15 largest global pharmaceutical companies spent a record $133 billion on research and development, up 44% from 2016. Yet, they face higher prices and limited availability for raw materials while also contending with increased product pricing scrutiny, which compounds overall margin compression. Data seamlessly captured, shared, and analyzed has the potential to streamline essential processes and save money that can then be applied to the most impactful aspects of the business.

Another problem when introducing new products is increasingly limited access to physicians. Sales reps can typically only secure a few minutes with physicians or organizations—if they can secure time at all. Most companies are leaning in to hybrid approaches to balance the need for face-to-face and remote engagement. This shift prioritizes better digital interactions that can deliver the most relevant content to healthcare providers on their preferred channels, improving the overall provider experience.

As the need for companies to leverage more data-driven decision-making increases, they must contend with data silos. Largely the result of legacy systems, silos hamper the flow of data between teams—impeding innovation. Data silos are particularly problematic for life sciences and healthcare organizations when considering the amount of data involved; 30% of global data volume is generated by this sector. Meanwhile, seamless data sharing is also hampered by strict data privacy requirements, which underscore the need for an agile, secure data cloud platform that enables companies to comply with stringent regulatory requirements.

This ebook will explore six best practices to help life sciences companies navigate complexity with insights gleaned by leveraging all of their data, including use cases for successful application, to drive effective commercial strategies.
6 BEST PRACTICES FOR BUILDING A DATA-DRIVEN COMMERCIAL STRATEGY

1. DEFINE BUSINESS GOALS AND METRICS

To be an effective data-driven life sciences organization, companies must incorporate technology to aid in strategy and go-to-market (GTM) plans. This is why it’s important to begin with a company’s unique “why.”

Defining why a company is using technology is just as important—if not more so—than “how.” Given the cost of clinical trials and intense market pressures, it’s crucial for life sciences organizations to specify the problem(s) they want to solve and determine how they will do it. This helps avoid deploying models that fail to address needs or meet goals.

To ensure a successful data science project, IT leaders may ask:

• Are the company’s data problems well defined?
• What are the problem’s data indicators?
• How will we measure success and impact?
• Are stakeholders sufficiently invested and confident that this project will provide a measurable return on investment?

A center of excellence (CoE) focused on data and analytics can help answer these questions and guide projects. A CoE supports the transformation of data into actionable insights. CoEs can be designed to fit a company’s needs and maturity level while offering a central hub for all data and analytics knowledge and initiatives. This positions the CoE to easily disseminate knowledge throughout the organization and accomplish two important goals: showcasing the value of insights enabled by data cloud platforms and developing a data-first culture.
2. BREAK DOWN DATA SILOS

Siloed data is a common challenge for many industries—particularly when strict security and privacy regulations are involved, as in life sciences. Data science success depends on decision-makers having all the information they need in one place and effectively harnessing it. For example, a more streamlined data organization can help marketing teams share drug, clinical trial, or market data seamlessly—reducing paperwork, bureaucracy, and errors. Centralized, usable data can improve collaboration across the business and regions, preserve privacy, and facilitate better outreach to populations that can benefit from a drug. Companies can use this data to more accurately identify target populations across demographics and behaviors, as well as product adoption challenges. This enables a more proactive approach, resulting in improved sales and marketing strategies and higher ROI for go-to-market activities.

Most life sciences organizations have decades of data stored in a variety of formats and across multiple systems. For example, it’s common for researchers, marketers, and sales teams to leverage separate data sets and applications. That’s why consolidating data through a cloud data platform that supports structured, semi-structured, and unstructured data across applications and solutions is critical for optimizing data sharing and collaboration throughout the organization, including marketing, sales, clinical, and research. Modern cloud data platforms can easily unite and manage large and diverse volumes of data, streamlining a company’s technology requirements over time.

3. DEVELOP AN EFFECTIVE COMMERCIAL DATA STRATEGY

To improve commercial effectiveness, in addition to driving organizational collaboration and innovation and maintaining data security, life sciences companies must consolidate data from many sources, including:

- Testing data
- Electronic medical records
- Real-world data
- Master and reference data

When data is unified and usable across applications such as business intelligence, artificial intelligence (AI), and analytics, business leaders and departments can better develop commercial strategies that drive sales and marketing effectiveness.

A modern cloud data platform allows for the management of numerous stakeholders, data sets, and platforms seamlessly and securely. Organizations can more fully leverage and expand data use, creating a framework that can scale to support new users and use cases. Greater visibility into every area of an organization facilitates better data governance and privacy compliance without impeding data availability and integrity. The result is data can more easily be harnessed to accelerate delivery of innovative treatments, forecast market demand through predictive analytics, and more.

4. HARNESS THIRD-PARTY DATA

Life sciences organizations can bolster their GTM analytics and strategies by using external or third-party data, such as population health, demographic, and real-world data. This data empowers teams to make better commercialization decisions, especially when it’s integrated with first-party data or data a company collects directly from its customers and owns. For example, by using public health data, a life sciences company with an innovative diabetes drug can target its outreach efforts to areas with a high concentration of patients with the disease.

However, sourcing third-party data from traditional data marketplaces can present challenges. Traditional data marketplaces are often inefficient, unsecure, and unable to scale. This is because they’re supported by legacy technologies for transferring data, such as FTP and APIs, which are error-prone, not always secure, and can require extensive engineering work to extract, transform, and load (ETL) data to make it usable. The end result can be costly delays, stale or inaccurate data, and poor data analysis results—not to mention an inefficient process for contacting individual providers and evaluating their data prior to licensing it.

It’s important to select a data marketplace that provides access to live, ready-to-query, third-party data in an easily discoverable, secure, and compliant way in the cloud. This removes the burden of data transformation, security, and governance and makes it possible for data analysis to begin right away.
5. MAKE SECURITY A PRIORITY

Due to strict privacy regulations, data security is especially critical in life sciences. In addition to the sensitive nature of participant and patient data, the industry faces a myriad of regulations for nonsensitive data collection and storage. Companies must navigate the European Union’s General Data Protection Regulation (GDPR) and adhere to Health Insurance Portability and Accountability Act (HIPAA) and GxP guidelines.

Data protection must be top of mind when life sciences IT leaders consider data types and partners for data collaboration, analysis, applications, and storage. When vetting potential partners, leaders should assess authentication control measures, encryption technology, and how log-in credentials are used and shared within the platform. These considerations should also extend to third-party applications built on top of the company’s own software.

6. USE THE RIGHT TOOLS AND PARTNERS

The ways in which life sciences companies use data to inform their commercial strategies differ for each drug and target population, and the measurements and definitions of success vary by company. To be effective, companies must identify the tools that are best suited to each team’s skills, composition, and goals. One way to ensure an organization is using the right tools is to provide options. Some companies will seek best-in-class data providers and cloud vendors, while others will look for providers with a small set of effective tools that suit their unique needs.

A long list of potential partners can be overwhelming. When choosing partners, life sciences companies should prioritize those with third-party validation and industry track records. For example, partners that have successfully executed AI or machine learning projects at scale may be attractive. Organizations should also ensure that integration of new tools will not exacerbate or create data silo problems. Finally, companies should prioritize agility and flexibility to ensure that the platform can grow with them as their needs evolve over time.
This U.S.-based multinational pharmaceutical and biotechnology corporation has been at the forefront of medicine since the mid-19th century. The company’s recent success has largely hinged on a hybrid model for connecting with healthcare providers (i.e., a combination of face-to-face meetings and digital interactions). Though face-to-face interactions remain important, omnichannel and remote engagement are playing increasingly important roles in its commercial strategy, which requires leveraging data.

THE PROBLEM
In a highly regulated industry, utilizing data to its fullest potential requires meticulous attention to security, privacy, and compliance. Pfizer wanted to optimize its commercial strategies by giving analysts the right tools to succeed and make their insights more actionable. While Pfizer embedded intelligence into its commercial systems several years ago, it wanted to integrate AI and machine learning to further leverage analytics in support of its goals.

THE STRATEGY
Pfizer now stores data across the cloud with Snowflake, effectively eliminating data silos and making data accessible to engineers without compromising the security of sensitive information. SQL analysts also run data workflows through Snowflake to harness the platform’s analytic and processing power and save valuable time. The company is also adopting Snowpark, which allows organizations to run data science workloads directly through the same platform, so “you shouldn’t have to bring your data to some other utility to run your code to run your transformations,” said John Pastor, Pfizer’s Director of Business Technology.

THE RESULTS
“We’re running more cost-efficiently and with better performance,” Pastor reported. Pfizer’s teams are spending significantly less time tracking down data and more time analyzing it and gleaning actionable insights. Running SQL workflows through Snowflake has also accelerated pipelines. In some instances, jobs that would run for 12 hours take as little as 20 minutes on Snowflake. Pfizer is also seeing more opportunities to collaborate throughout the supply chain as data becomes more readily synthesized and shareable.
Global Fortune 500 company Novartis is investing heavily in research and development and is on the forefront of a rapidly changing industry—from pharmaceutics to cancer treatments. Headquartered in Switzerland, this leading life sciences company applies a wealth of data to accelerate drug development.

**THE PROBLEM**

Since digital technology is increasingly important in life sciences, Novartis wanted to shift from on-premise infrastructure to cloud and data technologies that could help drug development teams better understand the needs of different populations and quickly deliver on them.

**THE STRATEGY**

In 2017, Novartis integrated Snowflake into its operations as part of its efforts to digitize its business. Specifically, Novartis wanted to apply AI and advanced analytics to the process of bringing a drug to market. The company’s goal was to deliver new drugs to consumers faster and more cost-effectively, while developing new services that let providers personalize treatment to ensure medicines are taken regularly and on time.

**THE RESULTS**

Novartis found Snowflake’s elastic scaling capabilities to be crucial in helping it achieve its goal of reducing time to market from 12 years to nine. Since it is now easier to share and collaborate on data—both within and outside of the organization—data is processed, analyzed, and applied more efficiently. “We would never be able to get access to this data in a timely manner with any other previous technology,” said Loic Giraud, Novartis’ Head of Business Analytics Center of Excellence. Giraud expects better outcomes for Novartis and its customers as a result.
U.S. multinational company IQVIA serves the life sciences industry by providing advanced analytics, technology solutions, and contract research. Created through the merger of IMS Health and Quintiles, IQVIA applies the analytic rigor of data science to new approaches for drug development and commercialization.

THE PROBLEM
IQVIA has the world’s largest healthcare and life sciences data network, with more than 1 million data sources and more than 800 million anonymized patient records in 100-plus countries. But its customers found it challenging to align global data deliverables with a common structure, making functional analytics difficult.

THE SOLUTION
IQVIA’s Data-as-a-Service (DaaS) offering, powered by Snowflake, provides a centralized hosting and data management solution. Life sciences companies can use the solution to source, standardize, integrate, and access data—increasing its value. The solution also establishes a common language and framework for integration, improving data consistency across systems while remaining flexible enough to evolve with industry changes. This advanced data-sharing capability means customers have quicker access to standardized data. They also benefit from a single repository for data across user groups, reducing their overhead in centralizing and accessing global data.
SNOWFLAKE ENABLES IMPROVED DATA-DRIVEN COMMERCIAL STRATEGIES

Accessible, secure, and well-managed data is extremely valuable to the life sciences industry, which is responsible for delivering essential drugs and services to improve the quality of life for people worldwide. In a highly regulated, competitive industry with colossal amounts of data, life sciences companies need cloud platform solutions that are agile, secure, and support end-to-end commercialization.

A modern cloud data platform that breaks down data silos, empowers users across functional roles and departments, and facilitates data security without sacrificing agility will help IT leaders at life sciences companies drive better commercial outcomes.

To learn how the Snowflake Healthcare & Life Sciences Data Cloud can unlock the power of data to drive your organization’s commercial strategy, visit Snowflake for Healthcare Care & Life Sciences.
ABOUT SNOWFLAKE

Snowflake enables every organization to mobilize their data with Snowflake’s Data Cloud. Customers use the Data Cloud to unite siloed data, discover and securely share data, and execute diverse analytic workloads. Wherever data or users live, Snowflake delivers a single data experience that spans multiple clouds and geographies. Thousands of customers across many industries, including 510 of the 2022 Forbes Global 2000 (G2K) as of July 31, 2022, use Snowflake Data Cloud to power their businesses.

Learn more at snowflake.com

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