CASE STUDY

CUSTOMER SUCCESS STORY

BUILDING A DATA PROCESSING PLATFORM WITH NEXT-GENERATION TECHNOLOGY TO INCREASE BUSINESS VALUE REALIZATION

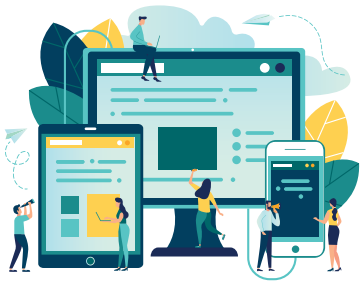
INTRODUCTION

The increased focus on patient outcomes, evidence-based medicines, and decreased costs have put the pharmaceutical industry on the road to continuous innovation. Organizations generate data at each step of this journey, whether it's drug commercialization or post-marketing surveillance. Consequently, there's "too much" data being generated with exploding data sources and the ever-increasing complexity of pharmaceutical products. This data explosion results in pharmaceutical organizations wading through deep pools of information, sometimes uncertain what they can do with it. More often than not, companies need a next-generation data management platform to store this data efficiently and make sense out of it. It is necessary to ingest the data and generate actionable insights to derive business value, making it crucial for pharma chiefs to invest in developing scalable and agile data management systems to gain effective outcomes.

The good news is – solutions are available! There is software that focuses on enabling key insights across therapeutic areas, brands, market access, patient hub, and commercial teams for superior cross-functional collaboration and insights. And, most importantly, the ability to effortlessly integrate with various tools and technologies, mater data management (MDM) platforms, customer relationship management (CRM)/ enterprise resource planning (ERP) systems, and downstream applications.

The following example depicts how Axtria helped a top-five global pharma create a streamlined "data to analytics" software solution, with Axtria DataMAx™, and increased substantial business value by clearing out systemic inefficiencies, downstream time-lags, and decision downtime through the hierarchy. Other than the tangible business value, the overall impact on the organization's pride in their work and motivation was invaluable.

AXTRIA
INGENIOUS INSIGHTS



BUSINESS SCENARIO

A fast-evolving healthcare landscape and the company's growing portfolio needs had increased the complexity and volume of data beyond the limits of existing data management technology and software capabilities. With an industry-leading product pipeline, upcoming launches, and an intense focus on driving higher data quality, quicker business results, and better patient outcomes, the company required a transformational commercial data management capability. They wanted to reduce operational interdependencies and related cost savings and demonstrate agility in supporting the changing healthcare environment and business needs.

Program Objectives:

1. Implement a next-generation commercial data processing solution to reduce operational inefficiencies, downstream data availability for decision-making speed, and cost.
2. Demonstrate agility in supporting the business goals and commercial effectiveness through launch excellence, scalability, and innovative dashboarding and insights.

CHALLENGES

Onboarding and integrating new data sources:

- The existing enterprise data warehouse (DW) was inefficient and unable to onboard the new data sources at the speed necessary to match the business needs.

Information processing and storage:

- The existing end-to-end "data to analytics" process execution was lengthy and lacked the flexibility to cater to various executives' customized and evolving needs.
- The data was highly inefficient with duplications and replicated outputs.

Information delivery:

- There was an added manual effort needed to customize the data for consumption readiness for different platforms.

Information quality management:

- Data validation was being performed across multiple process steps separately by different groups, causing a delay in overall consumption outputs and effort redundancies. This caused a serious lack of morale among different teams.
- There was no automated validation process to identify and resolve data anomalies and trend breaks – it was all eyeballed and managed manually.

Lack of a centralized business rules engine:

- The existing system was clunky, complex, and lacked transparency on how the business rules were created, implemented, and used for making business decisions.

There was a serious lack of morale across different teams due to redundant efforts and repeated steps with no clarity on objectives and impact of work. Senior executives were frustrated with downtimes and the inability to make fast decisions. The field was indifferent to the overall effort and the clunky existing system did nothing to help their motivation.

AXTRIA'S APPROACH TO THE SOLUTION

- The team carefully assembled data points and process steps to understand the existing process inefficiencies, decision system challenges, and business needs to enable a cloud-based solution to host commercial data software.
- A logical and consistent data transformation and processing model was applied to ensure data conformity between different sources. The team also applied strong and evolutionary loading rules with global standards.
- To ensure that the needs of various departments were considered at every step, the data objects were deployed with high-quality source-agnostic views of the current state of key data concepts such as call activity, sales, and speakers events.
- Exploratory data stores were deployed for all operations data management to ensure a future-ready and nimble system that could anticipate unseen data needs. They were enabled for readiness for further exploration by business and data scientists.
- Finally, different departmental business KPI reports were considered; therefore, the team looked to deploy operational reporting and enterprise reporting using standard BI tools. These tools could be easily procured and customized to the needs of all departments and business hierarchies with simple self-serve capabilities.

There was a careful consideration of the company's ability to scale the data processing needs as per their global needs.

KEY HIGHLIGHTS OF THE SOLUTION

40
Data Sources

~700
Input Files

250
Weekly Output Files

140
Monthly Output Files

40+
DQM Dashboards & Reports

5
Therapeutic Areas

60
Downstream Systems

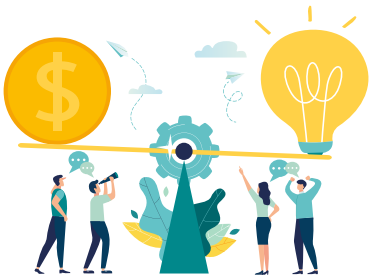
30
Brands

Daily, Weekly, Monthly, & Quarterly Processing Frequency

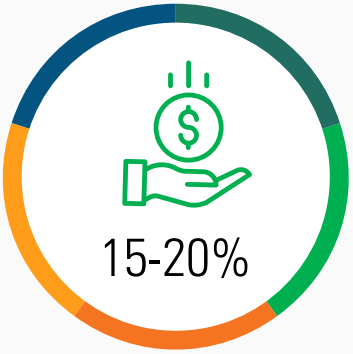
2.5 TB
Data Processed Every Week

150+
Commercial Excellence Analytics Users

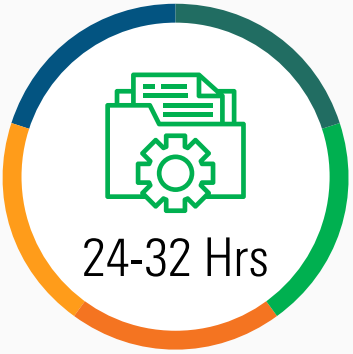
RESULTS



COST SAVINGS



DATA TO INSIGHTS



PARAMETER	OLD STATE	NEW STATE
Speed to Impact	7-10 days: for data processing Months: for new data onboarding	Hours: for agile data processing Days: for new data onboarding
Data Quality	Lack of data quality awareness and monitoring Redundant quality checks	Automated and proactive data quality monitoring Quality checks shift upstream for early warning
Business Rules	Business rules fragmented with little oversight Lack of transparency and trust deficit on data	A central business rules management system (BRMS) for visibility, transparency, and change control
Readiness for Future	DW mostly handled syndicated data Scalability and flexibility to onboard new age data was a challenge	Flexible and scalable architecture to enable launch excellence, new data sets, and commercial models
Technology Innovation	Inefficient to meet current needs Provided limited to no innovation	Highly efficient big data technology-enabled processing Provides newer capabilities and insights

BENEFITS

1. **Stay ahead of the curve with short cycle times:** Reduction in the cycle time (with a buffer availability to perform multiple reruns) meant speedy data to decisions. This reduced cycle time gave the company the ability to match industry and economic changes.

2. **Business scalability and future-readiness:** Implementing a data lake gave the business the ability to add new-generation data sources like patient data, digital data, etc., with speed. There was a new confidence in the business leadership to take "informed risks" to scale business decisions globally.

3. **Strong controls in the hands of business teams with flexible and agile business rules:** Since the business rules are fed directly into the commercial data platform, the business users handle the change management process with direct control and ease. They have a finger on every step of the process with visibility on potential missteps and the ability to amend.

4. **Additionally, a centralized business rules** library lent integrity across applications, therapeutic areas, and downstream systems, making the overall data to decision tree robust and error-free.

5. **Exceptional control on data quality with an automated data quality management (DQM) process:** Live dashboards with details of record drops, processing status, and data quality checks reduced system stress, and business operators could focus on downstream data customization for various business processes.

6. **Significant cost reduction with cloud and open-source technologies:** Movement from a capital expenditures (CAPEX) to operational expenditures (OPEX) cost model for infrastructure. Fast turnaround with low licensing cost meant significant financial control with the ability to scale up or down without much stress on budgeting.

Implementing the next-gen future-ready commercial DW had a significant impact on the morale of all business users across the board. The system operators had a nimble operating system with stress-free operations. Downstream users had negligible complaints about data readiness or quality. Business leaders were less frustrated with the ability to view new and contemporary datasets included in their decision-making process with speed. The sales teams had faster data available on hand for implementing sales force effectiveness programs.

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CONCLUSION

Axtria DataMAx™, a next-generation cloud-based platform, can manage the evolving data landscape and product portfolio of life sciences companies with its future-proof technology and pharma-based data model. Owing to its self-service capability to ingest data across all life sciences domains and a robust mechanism to govern and validate data, the platform can speed up the data to insights journey leading to quicker decision-making.

Founded in 2010, Axtria is a global provider of cloud software and data analytics to the life sciences industry. We help life sciences companies transform the product commercialization journey to drive sales growth and improve healthcare outcomes for patients. We continue to leapfrog competition with platforms that deploy artificial intelligence and machine learning. Our cloud-based platforms - Axtria DataMAx™, Axtria SalesIQ™, Axtria InsightsMAx™ and Axtria CustomerIQ™ - enable customers to efficiently manage data, leverage data science to deliver insights for sales and marketing planning, and manage end-to-end commercial operations. We help customers in the complete journey from data to insights to operations.

For more information, visit www.axtria.com

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