CASE STUDY

COMMERCIAL DATA MANAGEMENT AND SELF-SERVICE ANALYTICS FOR AN SMB PHARMACEUTICAL

AXTRIA DATAMAX™ ENABLED COMMERCIAL ANALYTICS FOR A NEWLY LAUNCHED VACCINE





INTRODUCTION

New drug development, especially vaccines, is considered high-risk and expensive. As per a recent report, the cost of developing a vaccine is estimated to be between \$200 million and \$500 million per vaccine and usually takes more than ten years to reach the market. Many promising treatments fail to get approval and do not reach the markets. Even the current COVID-19 related accelerated vaccine studies fraught with safety and efficacy related concerns. As of September 25, 2020², there are about 240 vaccines in early stage, 40 vaccines are in clinical trials, and only nine in the final stage of humans testing.

Given the high-risk and the investment, life sciences organizations, especially a small and medium business (SMB) pharmaceutical with newly launched vaccines and products, need well-planned commercial launches to make the product successful in the market. To achieve commercial success, they need a robust commercial data environment and analytics capabilities to make informed business decisions and realize the products' true potentials.

This illustration shows how Axtria engaged with an SMB pharmaceutical, enabled their future-ready data management capabilities and commercial analytics for a newly launched vaccine.

BUSINESS SCENARIO

An SMB pharmaceutical had launched its first vaccine product in early 2018. However, they had not set-up any data management capabilities. As the organization's analytics need grew, there was an immense need for the foundational data to support rapid insights generations.

The company faced several challenges including a higher turnaround time (TAT) for data preparation, even for small analytics exercises. The minimum time required was anywhere between 2 days to 2 weeks, and the effort was too high and cumbersome.







OBJECTIVE

There was a clear need for a centralized data management solution to house all source files and generate processed data, ready for analytics consumption. The client also wanted to create customers masters and democratize data to help commercial business users access measurable and actionable insights.

CHALLENGES

The lack of data management solution had some clear operational and functional challenges:

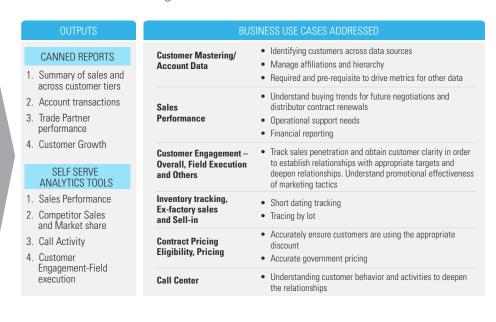
- There was no pre-existing data management platform to manage the integration
- There were disparate data sources which could not be integrated
- The company experienced challenges in data sourcing and delay by data vendors in sending the data
- The data analytics team was overworked and unable to keep pace with business needs
- Data preparation time for analytics was high from two days to two weeks
- Actionable business insights were unavailable
- The company needed a high-quality customer master at low investment
- Multiple versions of customer data existed due to the use of different sources and matching exercises
- The quality of customer addresses in CRM was inconsistent resulting in multiple queries from field

AXTRIA'S APPROACH

Axtria took a stepwise approach to make the processes simpler and deployed in-built features of its proprietary data management product - Axtria DataMAxTM.

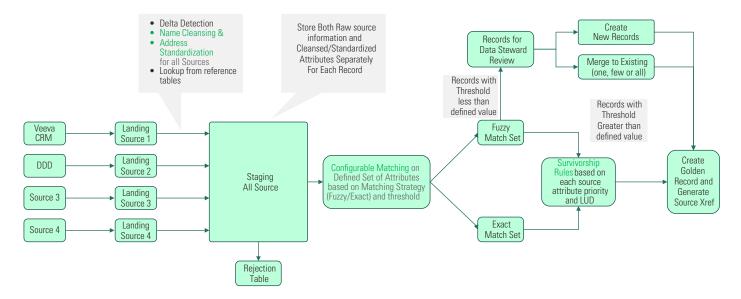
- End to end data warehousing, MDM, and reporting solution leveraging AWS Cloud
- Pre-built connectors and data models to rapidly integrate data sources
- Self-service Business intelligence to accelerate the speed for generating insights and democratization of data through





- Workshops during project initiation to identify critical business use cases and identifying data needs
- Axtria's proprietary lean Master Data Management solution eliminated the need for investing in high-cost MDM platforms:
 - The solution deployed a metadata-driven approach, with most components being configurable, according to the client's needs and requirements
 - Critical components of the solution:
 - » Name cleansing and address standardization
 - » Matching engine (it uses data from the different functions of the organization to compare records and determine their degree of similarity)
 - » Survivorship rules to create "golden records" to identify customers

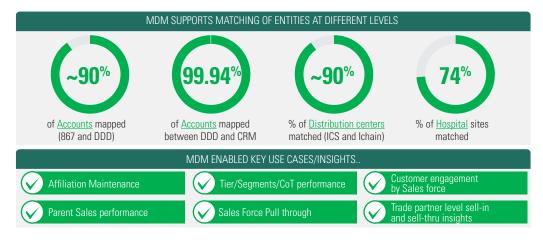




 Ensure best practices in MDM to improve the quality of source data attributes like name and address before mastering

COMMON SOURCES OF TRUTH FOR CUSTOMER DATA

MDM eliminated the need for ad-hoc matching activities by avoiding multiple versions of customer data



CHALLENGES AND APPROACH DURING IMPLEMENTATION

KEY CHALLENGES Unavailability of data sources for development Pre-built data model for rapid integration Gaps in data quality Data profiling for early detection of missing Unavailability of single point of contact to manage attributes, blanks, out of range values data acquisition Direct discussions with data vendors Change in key client stakeholders during critical to highlight and resolve open areas stages of project Comprehensive documentation of approved Increased UAT timelines since end users are business requirements to ensure alignment unaware of the business processing rules end Involvement and sign-off from end users outcomes at key stages (requirements, design, test plan) Changes required due to changing business to ensure alignment with end users priorities Customizable framework and meta-data Low quality of matching between DDD and 867 for driven code for reduced time for change requests Physician groups Exception process in MDM to handle cases Frequent changes to DDD data resulting in sudden where DDD name is 'Multiple Doctors' loss in visibility and trend breaks in sales Eliminate trend breaks for into key accounts by performance of key accounts proactively identifying changes using



KEY TAKEAWAYS

- Significant reduction in the data processing efforts of the analytics team
- Acceleration in the process of executing analytics use-cases for faster insights

Phased implementation

IQVIA 'Outlet Change Log' files

- Faster turnaround time for deliverables
- Trusted Customer Data available across the organization
- An accurate valuation of key customer segments
- Sales performance tracking
- Visibility into sell-in, sell-through, and product inventory buying trends to enable future negotiations and contracts with GPO and Trade-partners
- Higher quality of data for analytics due to detection of source data quality issues

Activity	Execution time (before implementation)	Execution time (post-implementation)	Efficiency gain
Generation of weekly Reports	~2 days	~1 hour	94%
Ad-hoc customer data matching between sources	~3-4 days	~0	100%
Ad-hoc analysis	~2 days	~1 hour	94%
The data processing required for analytics	~2 weeks	~0	100%

Alignment between DDD, CRM, and EDI data	95%
# teams leveraging Self-service tools	6 (Sales, Marketing, Commercial Ops, Analytics, Finance, Contracting)
Critical data quality issues detected in and resolved in the first month of implementation	5



CONCLUSION

Future-ready data management and analytics organization are a must in today's work. There are several benefits that an organization will be able to achieve such as significantly reducing the data processing efforts of the analytics team due to the higher quality of data. It will also help the organizations' leaders in tracking the sales performance.

Axtria team and leaders have worked extensively for both established and emerging brands and helped all life sciences organizations. The life sciences organizations and SMB pharmaceuticals like to partner with Axtria because of the Axtria's therapy areas and data sources experts.

As of today, Axtria's cloud-based data management platform, Axtria DataMAx™, has helped several clients rapidly onboard, manage, and govern new commercial data sources for insightful analytics and better decision making.

Axtria DataMAx[™] enables integrating all primary industry data sources (structured and unstructured data) with agility, accuracy, and compliance. It manages customer and product masters and provides cutting edge insights into customer behavior. With in-built governance and data linking capability, the platform's drag-n-drop nature enables complete control with unmatched ease-of-use across the organizational hierarchy.

REFERENCES

- https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC1551949/
- 2. https://www.bbc.com/news/health-51665497

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^{IM}, Axtria SaleslQ^{IM}, Axtria InsightsMAx^{IM} and Axtria MarketinglQ^{IM} - 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.

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