A Prescription for Change: Modern Data Architecture

Executive Summary

CastiaRx is a Pharmacy Benefit Manager (PBM) that manages prescription drug programs for Union groups and small to mid-size employer groups. As one of the first lines of defense in healthcare, CastiaRx understands the importance of bringing innovation to the Pharmacy Benefit Management space. CastiaRx recognized an opportunity to become an industry leader by improving data availability and quality, and to provide timely and accurate information to members. CastiaRx partnered with Inspire11 to modernize their data infrastructure and identify significant savings through improved insights and access to data.

Customer Challenge

While CastiaRx is firmly focused on defining better options around pharmacy benefits and are experts in the industry, they needed additional expertise in modern data management to transform their environment. CastiaRx needed a better solution, and different support for their team.

CastiaRx's primary challenge was surrounding data. With over 50 MS Access databases, and no single source of truth, CastiaRx was limited in their ability to get to KPIs and metrics that could truly enable data-driven decision making. The inability to address the gap in data was causing CastiaRx to miss out on savings and potential market-share.

Why AWS

Being part of the Healthcare Ecosystem, CastiaRx required a solution that meets the rigorous requirements to remain HIPAA compliant. CastiaRx was looking for a solution that could scale quickly– both from an infrastructure perspective, but also data volume, and accompanying data transformation and automation. A cloud-based solution was definitely something of interest to CastiaRx, but they needed guidance on navigating options.

CastiaRx was introduced to the suite of solutions provided by Amazon Web Services (AWS) including Amazon's Relational Database Service (RDS) to help simplify the administrative burden typical with on-premise based solutions. There were several driving factors for CastiaRx to select AWS, but the most critical were the ability to deploy quickly, the security of the data, the scalability of the solution set, and ultimately the cost.

About CastiaRx

Healthcare has lost its way. Care has been replaced by complexity and there's nothing healthy about that. At CastiaRx, we believe in better. Better treatment. Better care. And a better path to a healthier future for our clients and their members.

Why Inspire11

CastiaRx was looking for a true partner – one that was able to not only understand their business, but who was able to quickly deploy a solution. Inspire11 has a unique approach to partnering and demonstrated an ongoing willingness to work hard to be build a strong relationship at all levels of the business.

Most importantly, Inspire11 delivered. Inspire11's deep experience across data analytics, and modern data architecture helped CastiaRx to clearly understand the options in the world of cloud-computing. Partnering to implement the right solution for CastiaRx solution had significant impact to the bottom line.

The Solution: Differentiated Experience Through Modern Ecosystem

Over a six-month engagement, Inspire11 was able to partner with CastiaRx to aggregate all 50 data sets into an AWS based Modern Data Architecture. The solution included the utilization of AWS S3 and AWS EC2 to house the data, and leveraged MySQL, Python, and Alteryx for data presentation and advanced modeling, with Tableau as the primary presentation and reporting layer.

While the initiative was over six months, Inspire11 worked to provide interim opportunities for the CastiaRx team to access staged data. Along the way, Inspire11 was able to partner with the CastiaRx team to navigate industry-specific data sources including NCPDP Data, Medispan, and Mail Specialty Pharmaceutical data. The successful partnership was supported by a small team that was focused on deeply understanding CastiaRx's business and partnering directly with the financial analysis team to truly focus on delivering the analytics and insights most important to CastiaRx.

Results and Benefits

Having data accurate and readily available data, enabled CastiaRx to be a lot more flexible and responsive to adapting their business.

The Inspire11 and CastiaRx modern data solution was able to help realize significant results and benefits aligned to three major areas.

1. **Establish Single Source of Truth:** The engagement established a centralized repository ("Golden Copy") of transactional and master data from what had been a highly dispersed and decentralized environment:

    - HIPAA compliance cloud-based infrastructure
    - Automated reporting on business reporting

2. **Analytics & Insights:** With modern tooling on top of centralized data, CastiaRx was able to develop business insights and identify significant savings:

   ▪ Statistical analysis of pricing models

   ▪ Savings identified help CastiaRx realize a significant increase in EBIDTA over 7 month period

3. **Seamless Digital Experience:** With the suite of tools available and compatible with the AWS environment, Inspire11 and CastiaRx were able to build upon the centralized data repository (Data Lake) to provide members with a seamless end to end experience that meets members' growing digital expectations.

About Inspire11

The 11 in our name is significant in that it represents going above and beyond expectations…in everything we do. Our focus is on the perfect alignment of our proven, talented consultants with your most strategic and innovative initiatives. We help our clients by altering the DNA of companies to break down barriers so that everything (and everyone) is integrated and works together beautifully.