



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

Year:

2013

Status:

Laureate

Organization Name:

Explorys

Organization URL:

<https://www.explorys.com>

Project Name:

Explorys Enterprise Performance Management: Enabling Healthcare Providers to Explore Clinical Data in Real-Time

Please select the category in which you are submitting your entry.

Collaboration

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

The Project: Explorys EPM Founded in 2009 to transform the healthcare industry, Explorys integrates clinical, financial and operational data to help improve delivery of care and create better health outcomes, while reducing medical costs. The company created a secure, cloud-based computing platform, Explorys Enterprise Performance Management (EPM), that enables healthcare providers to conduct real-time exploration, performance and predictive analytics with clinical data. Challenges: Explorys needed to build a robust computing engine that was capable of merging and managing clinical, financial, and operational data silos, and that could accommodate the growing volumes of multi-structured

data being generated by today's ever-present medical and patient devices. Traditional database technologies and relational data warehouses could not scale economically or support the EPM platform's performance requirements. For example, if a healthcare practitioner wanted to understand something specific about a population or segment of data, they would need to request the information from their IT department and then wait several days – in many cases up to a month – for the information to be relayed back. Solution: Explorlys needed to employ a powerful yet cost-efficient analytics and storage solution to address its data challenges – Hadoop met those criteria. The company identified Cloudera as the most credible and reliable Hadoop distribution vendor, and moved forward building its big data solution, DataGrid, on the Cloudera Enterprise platform comprised of Hadoop-based software, management and support. Cloudera Enterprise enables Explorlys to process, organize and curate large batches of incoming data very quickly, answering complex questions in real time and shrinking the timeline to actionable insights from 30 days to mere minutes. EPM's Hadoop-powered analytics now facilitate clinical-quality measure generation, measure calculations for registries, proactive care management and other time-critical tasks.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

Explorlys was founded in 2009 as an innovation spinoff from Cleveland Clinic and that year decided to build their platform on Hadoop. By November 2009, they were in production with CDH as their core platform. They purchased a Cloudera Enterprise subscription in July 2011. They are continuously testing new technologies within the Hadoop ecosystem and continue to innovate their offerings.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

Yes, the implementation is now complete.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

The amplified benefit of Explorlys EPM is far reaching: More than a dozen of the nation's largest integrated healthcare providers have deployed Explorlys' platform, including Cleveland Clinic, MedStar, University Hospitals, St. Joseph Health



System, Catholic Health Partners and Summa Health System. These organizations leverage Explorys EPM to manage over 80 billion data elements, and are already benefiting more than 31 million individuals, 120 hospitals and hundreds of ambulatory venues. Customer Testimonials: "Before Explorys, one research data request to the MedStar Health Research Institute Biostatistics and Data Management department took approximately 8 to 12 hours. Using Explorys, that same request takes approximately 30 minutes, a savings of 435 labor hours over the first three months." – Neil Weissman, MD, FACC, President, MedStar Health Research Institute. "Technology and innovation is a key component of our delivery model. Explorys provides a core platform within our data ecosystem that will help enable us to identify and track patterns of care and outcomes, while at the same time, create additional opportunities to innovate alongside our peers within the Explorys network." – Larry Stofko, Senior VP and Chief Information Officer, St. Joseph Health System.

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

Explorys' EPM project represents a significant advancement for the healthcare industry and represents a significant innovation in solving the challenges facing the medical community as it strives to improve care without compromising patient privacy. The tools and methods Explorys employed in building its EPM has broad potential to address any number of data-driven applications. It's just one exceptional example of Hadoop's transformative potential. Massive data growth and the need for affordable, scalable, high-performance technology to analyze, manage and store it, is a common challenge and, more importantly, a massive opportunity shared across numerous industries today. With a strong enterprise-ready toolset and operational expertise like Cloudera Enterprise supporting it, the power of Hadoop can easily be applied to a near-limitless number of use cases to solve any number of data challenges.