

I3 Systems Use Case

Expanding Access to Research Data

Current Operations: Healthcare is a business but unlike many other businesses, research is a critical enabler that is needed to drive this industry forward. The medical industry is constantly researching new ideas that serve to create new drugs, new therapies, and new support systems. Unfortunately, the medical research that is required to test and prove new techniques takes time and is expensive.

Issues: When a private company or an academic research institution has an idea that impacts the way we practice medicine or change the technologies and techniques to improve healthcare outcomes, extensive studies are required to make sure the regime changes are effective, reliable and validated. This research requires that researchers recruit human subjects, walk them through an indication process, and then collect data that tests the expected results. These human studies are overseen by an Internal Review Board (IRB) that ensures the research is carried out under the most stringent ethical guidelines. When researchers need non-human data from third parties, teams of lawyers consider the proposed data exchanges and technical teams are then brought in to create the connections that allow the data to flow.

Solution: i3 Systems has been built to manage complex data flows in a data driven ecosystem. As data streams are defined within the i3 environment, a library of available data is created which can be searched by researchers (or others). When data is found that might be of value to their research effort, the researchers request access to the data stream. In order to provide the level of transparency important to any research endeavor, researchers that are seeking data outline their data policies related to data protection, privacy, and security. They also describe their use case and any incentives associated with their use of the data. Through a managed negotiation process, data producers agree to the terms and conditions before releasing the data to the researchers.

Benefit: Data driven research is the life blood of businesses and ecosystems. By making it easier for business and academic researchers to find and gain access to the data they need, i3 Systems allows more research to be done and makes research outcomes better. The nature of the negotiated agreement process also provides flexibility to data buyers and sellers to craft relationships that are support that specific need. These features allow institutions to offer conditional data to medical researchers, e.g. statistical summaries for the public, free for universities, at cost for non-profit, and charged when a for-profit companies

Status: The i3 system is being deployed by the City of Los Angeles. The City of LA saw the problem that i3 Systems was solving as a growing need as the importance of data continues to grow. I3 Systems is seen as a way to manage the City's strategic need to manage growing volumes of data within the city and a way to manage on-boarding of independent data. The System also provides a pathway by which the city can consider new business and service models that are supportive of the City's long term vision.