Revolutionary Data Security
Top Ten Multinational Pharmaceutical Company

Business Profile

The company is a publicly traded technology-driven global pharmaceutical company that generates around $40 billion in revenue and provides innovative healthcare solutions for a multi-national customer base.

As a pharmaceutical research and manufacturing leader, this organization dedicates over $10 billion annually to developing new treatments. Because their modern research infrastructure is highly data-driven, it generates massive data sets and collects highly sensitive information on research participants worldwide.

Research organizations of this caliber deal with multiple data privacy regulations. In the US, the collection and use of Protected Health Information (PHI) are governed by the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The General Data Protection Regulation (GDPR) governs the personally identifiable data of every EU citizen.

Challenge

The customer organization conducts large-scale medical and pharmaceutical research that must comply with stringent Food and Drug Administration (FDA) guidelines. Much of the data collected and used during the course of their many research projects contains sensitive information subject to regulations such as HIPAA and GDPR. Compliance and privacy laws require strict data monitoring and logging that accounts for anyone who has accessed or modified it.

Managing this sensitive data required more than simply blocking access. Different individuals needed access to the data for statistical analysis and collaboration. Sanitizing data sets for analysis was needed to ensure compliance and appropriate sharing, which involved manual, time-consuming, and labor-intensive processes.

This problem also complicated collaboration with external researchers. Legacy and traditional solutions made sharing data outside the customer organization impossible due to challenges surrounding blocking sensitive data and the need to track and monitor access and utilization to meet compliance standards.

Additionally, the collection of data created an unusual use case. Collectors sometimes gather data off-site from participants and need to enter it into a larger data set. The individuals collecting the data need access to the specific data they collected to modify typos and omissions. Still, these individuals were not authorized to have any access to some of the sensitive data within the larger collective data set.
Results

Since the integration and implementation of Sotero, the pharmaceutical research company has seen dramatic improvements in its research operations:

- Streamlined data tracking with Sotero collecting an in-depth audit trail of all access attempts.
- Improved data security with machine learning to identify threats based on deviations in data utilization.
- Simplified, secure external data sharing, allowing secure collaboration with researchers.
- Protected data throughout its lifecycle in transit, storage, and during use.
- Enabled different teams to share data sets while maintaining privacy and security controls to restrict sensitive data visibility where needed.

Instead, role membership could be altered in one location, propagating out across the organization.

Using Sotero, the customer gained full control over what fields are visible or modifiable to researchers. Encryption protects data from inappropriate access and theft. Masking keeps these fields in the same format and size without leaking sensitive data.

The Sotero Data Security Platform allowed teams to share data and meet compliance mandates. Rather than meticulously maintaining access logs of data access and modification, Sotero’s solution oversees all access and maintains tracking for them. This eliminates the tedious and cumbersome tracking process and automatically generates proof of continual compliance for auditors.

The pharmaceutical research company experienced a holistic improvement in its security posture. Sotero’s threat detection maintained visibility of data utilization across the organization. Using machine learning and tracking numerous data access factors, internal and external threats were rapidly identified, stopping attackers before breaches could gain a foothold in the organization.

Solution

Sotero has transformed how the pharmaceutical research company was able to develop and manufacture products, increasing customer satisfaction and accelerating development.

Working with Sotero, the client seamlessly protects sensitive data within collective data sets while maintaining collaboration and analysis. Additionally, in-depth tracking and monitoring of all access and utilization kept them in alignment with the many different regulatory data privacy standards required.

The Sotero Data Security Platform streamlined and simplified the management of organizational data sharing. Due to Sotero’s seamless integration, the customer organization utilized existing infrastructure to assign role-based permissions to data sets. They no longer needed to manage changes in data when users came on, changed roles, or left the organization.
Secure third-party data management that improves collaboration

Data stays encrypted at all times, enabling you to share data with downstream systems and third parties without ever putting security or privacy at risk.

About Sotero

The Sotero Data Security Platform provides a centralized way to encrypt and protect data through its entire lifecycle – at rest, in transit, and in use. With real-time detection and automated quarantine of malicious access, Sotero also prevents active threats, giving you 360-degree data security without disrupting the user experience. With our lightning-fast encryption and our point and click set-up, Sotero’s solution is easy to deploy and manage, ensuring you are protected in a matter of days, not weeks or months.