

HARNESS NEW TECHNOLOGY

Accenture Scientific Informatics Services

BUSINESS CHALLENGE

The client is a leading innovator in providing rapid, accurate genomic and DNA analysis systems and services. Its mission is giving healthcare providers tools and information to combat life-threatening antibiotic-resistant infections using molecular genomics and bioinformatics. In support of this mission, the client launched a **CLIA-certified diagnostic laboratory** to help hospital staff affordably and accurately screen for, diagnose, prevent, and manage multidrug resistant organism threats and infections. Accenture Scientific Informatics Services was engaged to help the client manage an aggressive timeline to implement a system supporting the launch of these new clinical laboratory services.

PROJECT APPROACH

To guide vendor selection and define implementation scope, the Accenture team:



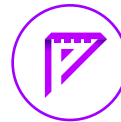
Conducted one-on-one interviews with laboratory personnel to develop “as-is” and “to-be” workflow diagrams



Generated and validated user requirements based on workflows



Performed a detailed market analysis



Assisted with architecture planning

They then identified a cloud-based laboratory information management system (LIMS) to support the laboratory. The vendor selection activities provided the foundation for the team to develop a strategic implementation plan, focused on delivering the highest value functionality within strict business deadlines. The team and the client worked together to prioritize critical system and high-value functions to be implemented in the initial release. In parallel, the team supported the LIMS platform’s configuration, testing and deployment. The system was developed in an iterative prototyping model that kept the client constantly engaged in its evolution. As system development entered the final phase, the Accenture team executed training and data prep for system go-live. Following go-live, the team continues to support and develop the system. For example, the Accenture team later automated key system functionalities to provide a smoother, faster end user experience.

RESULTS

The LIMS platform was implemented within the established timeline. The client now has configurable functionality to support its scientific needs and can scale without hardware upgrade projects. Additionally, the client benefitted from:

Consolidation

of microbial and genomics testing into the central LIMS

Quick turnaround time

(<24 hours) on certificates of authenticity and results, delivered to client customers via an external portal

Improved data quality and accuracy

by interfacing instruments to the system (where beneficial), allowing rapid “real-time” data transfers and precluding end user “typos”

Optimized management of laboratory personnel and processes

via output of statistical and operational summaries related to sample turnaround, test and instrument performance, analyst performance, and quality control compliance