CASE STUDY

BUSINESS PROCESS MANAGEMENT – OPTIMIZING WORKFLOW AND CROSS-PLATFORM INTEGRATION

BUSINESS CHALLENGES

Our client, the Pharmaceutical Development group within the R&D division of a Global Pharmaceutical Company, generates very large quantities of laboratory samples that need to be systematically analyzed, using a broad range of tests, instruments, and analytical methods. The current highly inefficient workflow, which crosses different departments and information systems, poses serious challenges to the organization, including:

- The need to use multiple systems with widely differing user interfaces during the course of each sample submission lifecycle, including:
  - Electronic Lab Notebook (ELN)
  - Laboratory Information Management System (LIMS)
  - Scientific Data Management System (SDMS)
  - Enterprise Resource Planning System (ERP)
  - Compound Registries
  - Document Repositories
- Uneven data quality and redundant data entry
- Insufficient process visibility:
  - For the requestors: into the status of requests and availability of results
  - For the analysts: into the drivers and parameters for analysis
  - For the managers: into workload management and instrument utilization

THE ARBORSYS SOLUTION

ArborSys proposed deploying an Appian Business Process Management (BPM) solution, together with a supporting service layer, to optimize the workflow and provide a seamless user experience, more efficient throughput, and end-to-end transparency to all stakeholders. The team worked with the client to:

- Assemble a highly effective multi-disciplinary team of scientists, information technology staff, and ArborSys consultants
- Assess the current business process, data flows, and operational environment
• Establish a target vision of an optimized process and best fit technologies
• Implement a collaborative, rapidly iterating, initial Proof-of-Concept (POC) implementation focused on clarifying the business requirements, desired user experience, and suitability of the selected technologies and architectural approach
• Leverage the POC to rapidly initiate and implement the solution

VALUE DELIVERED

The way in which the POC was designed and executed (over the course of just a few weeks) provided the following benefits to the client:

• Rapid clarification of business requirements and the desired user experience through rapid prototyping and collaborative design and review sessions
• Validation and refinement of the proposed technology solution and attainment of a deeper understanding of the required integrations and data management improvements
• Exposing the client (both IT and business constituencies) to an agile and collaborative development methodology that accelerates program execution and delivers solutions that are more closely aligned with business needs (while promoting team collaboration and enthusiasm along the way)
• A coherent vision and plan to implement an enhanced user experience for managing and visualizing the workflow of lab sample analyses, from the initiation of an analysis
request through making the test results available to the requester, and providing resource management tools, process metrics, and Business Activity Monitoring

- Ability to rapidly plan for the implementation projects to build, test, and deploy the required process automations and integrations for the experimental workflows within the Pharmaceutical Development teams