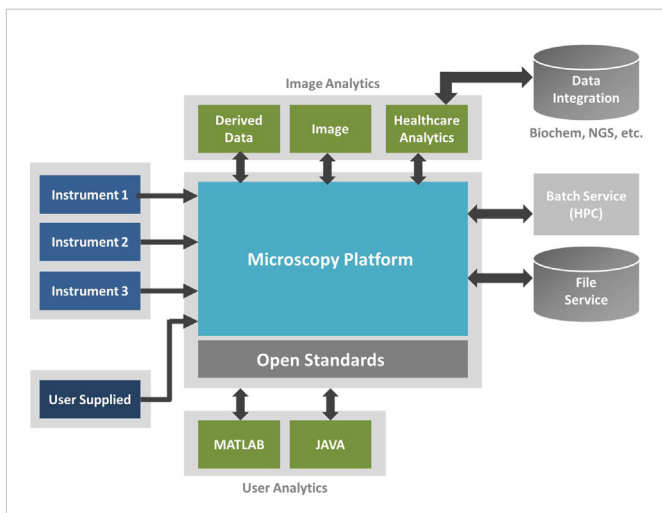


Case Study: Image Processing, Visualization and Analytics for Cellular Research

Client Requirements

Client is a leading provider of medical imaging and diagnostic services to pharmaceutical and life sciences companies. Client manufactures a wide array of high resolution microscopy and cellular imaging platforms for research and drug discovery. These platforms produce massive amounts of high throughput multimodal imaging data.

Client wanted to build an enterprise-scale analytics platform to gain visual and clinical insights from the data generated from these platforms. Citiustech was selected to custom build this analytics solution and integrate it with the existing platforms.



Citiustech Solution

Requirement Analysis

Citiustech put together a team of imaging consultants, analytics specialists and product engineers to perform a detailed analysis of the range of devices manufactured by the client – including medical imaging, pathology, and clinical systems.

Based on its assessment of future analytics requirements,

Citiustech recommended that the client's existing visualization and analytics tools be replaced with a new unified platform.

Solution Design

Citiustech's solution was designed to perform a wide variety of advanced analytics operations, including:

- Capturing images configured based on a particular assay
- Analyzing and interpreting data from live and fixed cell assays
- Performing complex subcellular assays
- Quantifying multiple-biomarker expression patterns and correlating to relevant non-image data
- Visualizing and interpreting statistical and machine-learning analytics results

Development and Deployment

Citiustech led the end-to-end identification, design, development, customization and testing of the required unified image processing, data visualization and analytics platform.

Citiustech created a comprehensive solution that could integrate with a wide variety of source systems and had the ability to support and accelerate multiple internal programs.

The solution was developed in a reusable manner for image analytics across various client initiatives.

Value Delivered

By partnering with Citiustech, the client was able to:

- Create a unified analytics platform that works synchronously with multiple imaging tools, serving varying needs and configurations
- Leverage Citiustech's expertise in imaging, analytics and data quality management to build a high performance solution
- Leverage Citiustech's integration expertise to interface with the existing modules
- Accelerate deployment by reusing existing technology platforms and components, leading to faster go-to-market for client's analytics offerings

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About Citiustech

Citiustech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations. Citiustech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, BI/analytics, consumer engagement, care coordination and population health management.

Citiustech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, Citiustech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.

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