

Case Study:

Image Management Optimized Across Pharma R&D

OVERVIEW:

As the volume of images generated and acquired has increased exponentially across pharma R&D organizations, many pharma organizations have implemented solutions to meet the needs of individual groups. As a result, the most challenging—and unintended—consequence is the decentralized reservoirs of images and data that can be difficult to access and leverage for research.



BUSINESS CHALLENGE

A global Pharmaceutical company's Lead Development, Pathology, Radiology and Biologics groups' image management had become increasingly decentralized over many years. Some of the groups' needs involved event-driven image collection and analysis, while other groups' needs involved a high-volume of image processing (e.g., High Content Screening) with automation.

To accelerate transformation of this decentralized image management environment, the senior leadership team wanted a strategy to complement specialty imaging systems with:

- more consistent collection,
- enhanced storage, and
- accessibility for broader use of images and image data (e.g., metadata, analysis) across R&D.

This modernized image management environment would enable researchers to focus on innovative science rather than having to find and manage images and data.

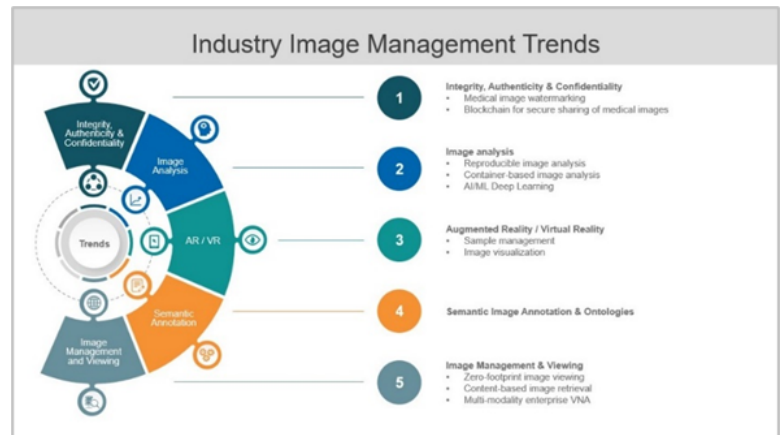
HOW RESULTWORKS ENABLED SUCCESS

Working with the client's internal team, ResultWorks:

- interviewed key stakeholders across the industry to maximize its assessment including its own industry insights.

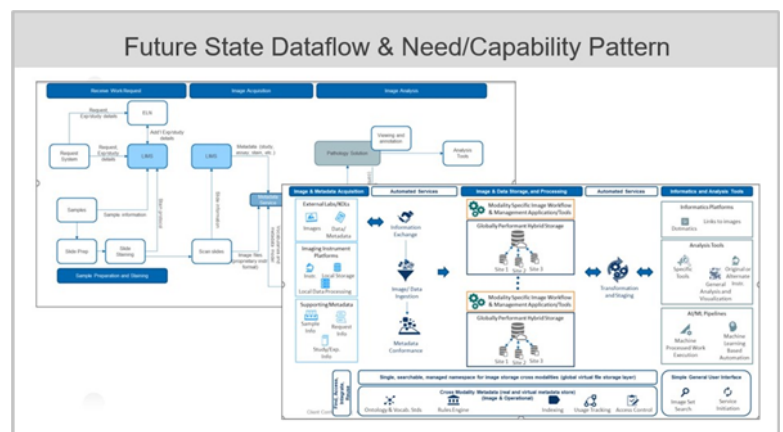
- defined a comprehensive R&D Image Management Strategy for the capture, analysis, transformation, and access of scientific images and image data.
- defined the forward-looking R&D image management capabilities needed across these aforementioned imaging groups.
- defined a high-level data and technical architecture, and supporting data architecture, to optimize the management of R&D images and image data.

The initial effort centered on summarizing and defining critical needs of image management for these specific groups to support a follow-on commercial technology assessment. The technology assessment identified relevant industry trends and lessons learned from leveraging biomedical image management technology across pharma and adjacent industries. Among the numerous trends defined in the assessment included the use of blockchain for secure sharing of medical images, reproducible image analysis, and content-based image retrieval.



In preparation for defining a future state, technology components needed to support required image management capabilities were identified.

Through a series of stakeholder interviews and group working sessions, the team was able to converge on the capabilities and technologies needed for the future and prioritization of those capabilities and technologies. ResultWorks led in the identification, and prioritization of capabilities and technologies so that they could be organized by workstream. A high-level strategy roadmap, to guide investment decisions, was produced using the workstreams and their priorities. Each functional area received individual strategic roadmaps that included actionable project descriptions to guide the implementation teams.



THE RESULTWORKS IMPACT - KEY BENEFITS

Since no off the shelf solution would be appropriate, ResultWorks focused on working with the client team to produce a clearly prioritized strategic roadmap that outlined and organizing the key project activities. The resulting roadmap covered the capabilities and needs across Radiology, Pathology, and HCS workflows. With this roadmap, ResultWorks partnered with the client, to guide alignment of the

stakeholders on a future state strategy. A specific approach was taken for each functional area while leveraging common technical frameworks where possible.

The strategy was leveraged to complement specialty imaging systems with more consistent collection, storage, and accessibility for broader use of images and image data (e.g., metadata analysis) across R&D.

For more information, visit our website (www.resultworksllc.com or www.astrixinc.com) or contact us at:

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