

Siemens Healthineers Leverages Flywheel to Accelerate Research and Development

Siemens Healthineers Molecular Imaging, a leader in healthcare technology, has partnered with Flywheel to revolutionize the way their research and development (R&D) teams handle imaging data. By using Flywheel as an internal data archiving solution, Siemens Molecular Imaging has streamlined its imaging data management and ability to work collaboratively across teams.

The challenge

Siemens relies on uploads of scans from multiple customer sites to optimize its devices. This is particularly critical for new systems, where rapid feedback and adaptations are essential.

“It’s difficult for all involved parties to get access to files, and the unstructured nature of a standard file system for data sharing exacerbated this,” explains Bruce Spottiswoode, Director, Clinical Applications Research at Siemens Healthineers.

Siemens needed a scalable solution that would:

- Automate data upload and distribution across teams.
- Enhance security, adhering to rigorous data-handling mandates.
- Enable flexible access for various research and project teams during feature development and testing.

The solution

Flywheel provided Siemens with an end-to-end medical imaging data management and analysis platform that combines automatic data ingestion and curation along with robust security and search capabilities. This has allowed Siemens’ R&D, product management, marketing and other teams to quickly retrieve, analyze and share data, ultimately supporting an efficient and collaborative environment.

The results

The structure within Flywheel allows Siemens' teams to focus on deriving insights from their data, rather than time-consuming data handling. For example, in a project focused on lesion segmentation, they're able to easily store and sort all segmentation objects. This allowed for a custom search for cases with lesions in the liver, allowing one research team to quickly identify 200 relevant cases and tailor software to run tests using that data.

"Flywheel has a wonderful structure to it," Spottiswoode says. **"Our teams really appreciate how searchable everything is, and the built-in viewer is invaluable as well."**

With Flywheel's centralized data platform, Siemens has also unlocked downstream uses for its data. For instance, its clinical marketing team can create collections and share these with sales colleagues.

"When new data is uploaded, it arrives in a particular project and can be automatically routed to an internal viewing server," Spottiswoode explains. "This helps our project managers and marketing teams instantly act upon it."

Key Benefits of Flywheel

- Elastic search for precision image retrieval
- Superior project management, with access control and user roles
- Improved upload and access via Python SDK

Helping Siemens develop the next wave of innovation

Incorporating Flywheel into its imaging workflows has allowed Siemens Healthcare Molecular Imaging to stay at the forefront of healthcare technology while saving time and optimizing resources. With Flywheel, Siemens is well-equipped to continue pioneering advancements in medical imaging and healthcare solutions.

"Between project management, where we can carve out a project and give role-based access to people quite easily, and the elastic search functionality for research and marketing, it's been extremely powerful," Spottiswoode says. "And we're just getting started."

Visit flywheel.io

[Schedule a demo](#) or get in touch with a [Flywheel representative](#).