



Kalypsys, Inc., a clinical-stage pharmaceutical company, engages in drug discovery and development. The company also designs, develops, and markets automated systems and workstations for the drug discovery market, including large and small automated robotic systems. The company was founded in 2001 and is based in San Diego, California.

Challenge

Kalypsys needed to integrate a custom data transformation application

Chemists and biologists at Kalypsys used an internal web-based application to fit the curves of data points. The wizard allowed scientists to use a custom-built data modeler. They wanted to integrate a 3rd-party modeler. The 3rd-party modeler was a rich client application with hooks that allowed other 3rd-parties to input raw data transform the data and output normalized data.

Solution

Fairway quickly delivered useful software and value for the client

Kalypsys engaged Fairway to refactor existing non-modular code for generalized services and to create a backend service layer to integrate the 3rd-party modeler. Within two days, Fairway's expert gained challenging new domain knowledge and began the project on-site full-time. Fairway's responsibilities included architecting, principal implementation and unit testing. User-interface design and acceptance testing were provided by internal client resources.

After recommending a refined design, Fairway extracted and generalized a service interface from the existing application. Fairway then created two service implementations, one for the existing custom-built modeler and the other for the 3rd-party modeler. Fairway employed test-driven development heavily throughout this project by creating a test suite that included all hooks and transformations which could be reused for future projects.

Benefits

- Three to four months after Fairway's initial engagement, approximately 100 satisfied scientists were using the updated application with its additional 3rd-party modeling option.
- Throughout the project, Fairway maintained a good working relationship with the client.
- The refactoring work and adherence to best-practices subsequently allowed the biotech company to easily add plug-ins for additional modeling options.

Technology

Tools and technology used:

- Oracle
- Linux
- Java
- Spring Framework / Hibernate
- Subversion
- Putty