

The “business end” of integration

Integration is a vogue word in informatics today. In the biopharma industry, it is touted as the indispensable prerequisite for reducing discovery and development times as well as costs and for improving success rates in drug development. Consequently, most discovery informatics suppliers are positioning themselves to assist their biopharma clients with informatics integration.

MDL differentiates itself by stressing the importance of business integration in which workflow, decision-making, and knowledge management processes are tightly linked to each client's strategic business direction—and by implementing complex integration projects in a phased approach that is tailored to each company's evolving business needs.

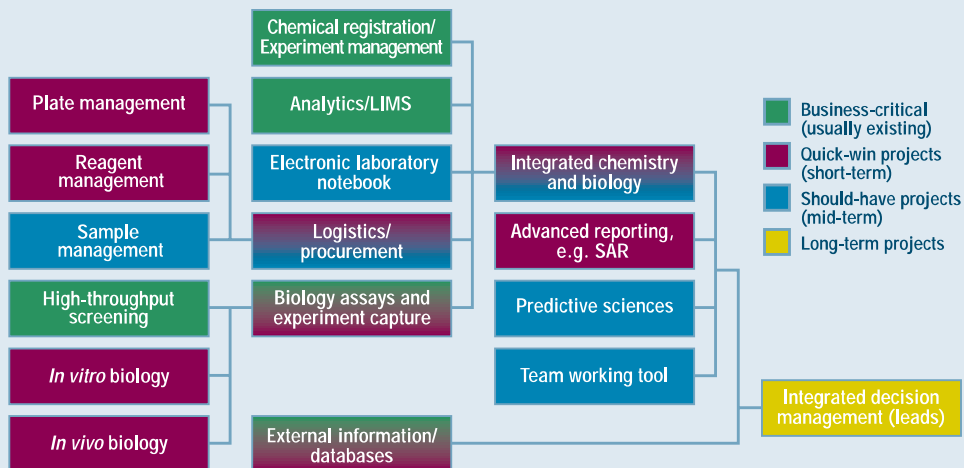
“The integration of discovery informatics is closely related to the strategic business choices a company makes,” says Francis Benett of MDL Consulting. “For example, companies focusing on early stage target identification and validation require different informatics capabilities than companies working on later stage lead identification/optimization projects. In addition, discovery informatics has to support the way research organizations work in a continuously evolving research environment.”

Powering integration with MDL® Isentris™

The many mergers, alliances, and partnerships in the biopharmaceutical industry today are triggering complex discovery informatics projects, especially as highly specialized teams of researchers who are geographically separated from each other and not used to working together must exchange information and collaborate effectively. With an underlying informatics architecture like MDL® Isentris™ in place—one that is open, scaleable, flexible, and customizable—discovery informatics need not be the rate-limiting step in implementing strategic discovery decisions.

MDL Consulting believes that enterprise informatics integration encompasses much more than data alone. It must also take into consideration the two closely related areas of business and application integration. With its powerful underlying database services, integrating middle-tier development environment, and strong set of new applications and user interface tools, MDL Isentris is the ideal system for integrating discovery informatics and business processes.

“Because it extends vertically and horizontally throughout an enterprise, business integration is



This figure illustrates a phased approach to enterprise integration for a typical company with a small molecules focus. In this example, individual projects are prioritized into “business-critical,” “quick-win,” “should-have,” and “long-term” categories.

by far the most challenging type of integration,” says Benett. “By the same token, only those integration projects that have a large enough business integration component will have a high chance of success.”

Aleksandar Ruzicic of MDL Consulting adds: “Too often companies attempt to shortcut the difficulties inherent in business integration.

For example, they try to integrate data across an organization without first standardizing data capture across their chemistry and biology teams. Discovery informatics managers need to address the trade-offs between harmonizing data capture, thereby enabling simple integration for searching/browsing, and ‘brute force’ data integration.”

Managing chemical and biological data with MDL® Assay Explorer®

MDL® Assay Explorer® is an enterprise system that centrally stores and integrates biological and chemical data, capturing both experimental results and methodologies, in an Oracle® environment. To assist in Assay Explorer implementations, MDL Consulting works closely with its clients' scientists and discovery managers to build a consensus on what data models and protocols they will use, thereby ensuring the earliest possible collection and integration of data, in its proper context, to facilitate better decisions. The ultimate goal is the integration of numerous scientific applications with a single globally searchable biology/chemistry warehouse, potentially replacing hundreds

of discrete applications with MDL Assay Explorer—a single comprehensive data management system.

Implementing an integrated discovery informatics strategy

Companies migrating to a modern, n-tier informatics architecture like MDL Isentris need to decide how best to achieve the goal of integrated discovery informatics by:

- Differentiating levels of integration: business, data, and application
- Translating their business needs into an appropriate informatics strategy
- Mapping a path to integrated decision management through effective application integration

Informatics integration involves substantial time, effort, and investment. To ensure an optimal integration solution and successful implementation, companies must promote business integration as a prominent factor in the equation. Only after thoroughly understanding a company's overall business strategy, as well as its organization, processes, and people, can an informatics supplier provide meaningful guidance on the best approach to informatics integration. MDL Consulting is committed to performing this in-depth, cross-functional analysis—and to making informatics integration a key driver of business and performance improvement. ■