

# State of the ELN Market

A look back at the past 12 months



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Over the last 12 months, the market for ELN technology has evolved from one dominated by sales to a handful of large biotechnology and pharmaceutical companies, to a diverse landscape of markets and organizations. This has caused a sea-change in both how suppliers approach the market and the features they offer.

For the past nine years, major pharmaceutical and biotechnology research and development organizations have had an insatiable appetite for ELN to improve operational effectiveness and achieve knowledge management strategies. Despite the economic downturn in the last four years, these companies invested millions of dollars rolling out tens of thousands of ELN seats. But, for many of these organizations, the vast majority of potential users have been deployed. Site closures and the epidemic of pharmaceutical layoffs have reduced the number of available untapped users.

So, what does this mean for suppliers? "Volatility" is the word used by

the head of marketing at one major ELN software company. Another said, "We are not as shielded from the global economy as we once were."

Suppliers' business models have adapted to a changing market place. There are increasing emphases on services, expansion horizontally from R&D into quality, broadening into new markets, and re-branding ELN as a component of a larger informatics puzzle.

Pressures on IT to deliver installations without the addition of headcount has resulted in rapid growth (>30 percent year over year) in professional services. A company may have hundreds or thousands of ELN users asking IT for additional functional capabilities, new templates and integration with other technologies to simplify their user experience. Unlike in the LIMS market, where there is a large and robust ecosystem of third-party providers, IT commonly turns to the supplier to provide such services. The downside is that this creates a rather significant backlog of

work and long lead times. Therefore, in the last year, we have seen a small but growing number of independents, and this trend is expected to continue. LIMS consultancies have entered the picture as well, though they often lack the necessary domain expertise in biopharmaceutical discovery and early-stage development — areas outside the traditional LIMS areas of analytical and QA/QC. Alliances also are starting to form between suppliers and independents to better manage the "spike" of service requests that can come from large clients.

As was the case in LIMS back in the 1990s, where early-adopter pharmaceutical companies' sales began to flatten out, the interest from other markets is rising considerably. Food and beverage is turning to the technology to integrate research into an overall product lifecycle management (PLM) strategy where the formulations modules designed for pharmaceuticals can be adapted relatively easily for recipe design and management. Chemical

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companies are quickly adopting the reaction design modules developed for medicinal and process chemistry. ELN in consumer products is growing strongly, to enable knowledge sharing across multiple worldwide research sites. Though biopharmaceutical sales will continue to be substantial for the foreseeable future — particularly with contract research organizations, quality control/assurance departments, and with small to medium enterprises — the share of the market represented by large life science organizations will shrink from its current 70 percent.

Market dynamics are changing vendor approaches and business models. Sales of ELN are still dominated by "the big three" of PerkinElmer, Accelrys and IDBS comprising over 60 percent of total software sales. To address the increasing number of niche markets, the number of suppliers has actually increased to now near 40 (for a list, see [www.atriumresearch.com/html/eln.htm](http://www.atriumresearch.com/html/eln.htm)).

Market share has not been achieved simply through organic growth. Accelrys and PerkinElmer have been on a buying spree, consolidating complementary solutions that addressed portions of the market. Over the last year, Accelrys acquired cloud-based ELN Contur and, most recently, VelQuest, the market leader and pioneer in the laboratory execution ELN space for cGxP analytical and quality assurance and control. PerkinElmer was the biggest spender in the last 18 months, picking up market leader CambridgeSoft, as well as ArtusLabs and LIMS integration frontrunner and lab execution ELN provider Labtronics.

This roll-up of various brands and coupling with existing technology (e.g., Pipeline Pilot at Accelrys, Labworks LIMS at PerkinElmer) is forcing suppliers

to change their messaging to the market. The move from domain-specific solutions toward a broad horizontal platform spanning research to quality is resulting in new branding. PerkinElmer now positions the "Ensemble" platform across their product suite. Accelrys now talks of their "Accelrys Enterprise Platform" instead of individual products.

The trend seen over the last three years in the movement to informatics convergence<sup>1</sup> to address workflows downstream from early discover research continues unabated.

- PerkinElmer promotes their "RD LIMS" module, a set of sample and test tracking capabilities built off the ELN platform.
- IDBS introduced test request functionality and their "Asset Hub," which is a module to track samples and materials like a LIMS.
- Accelrys is now reselling the BioRails from Edge Consultancy, a biology data management platform with workflow and status tracking features.
- VelQuest has long looked like a LIMS-variant, so Accelrys adds those capabilities as well.

This trend, naturally, caught the attention of LIMS suppliers. All the major LIMS players have dived into the pool themselves or have partnered with an ELN vendor. Over the last year, LabWare in particular has enjoyed considerable success selling their combined solution.

Despite convergence, integration of multiple products, and vendors positioning a grand architecture, one of the most interesting trends of the last year was the movement back to the ELN as a generic platform. In the early adopter phase of the market, clients asked for an increasing number of product extensions to address needs in domains like

medicinal and process chemistry, drug metabolism, formulations and pharmacology. This resulted in increasingly feature-rich and complex products. Exploiting these productivity-improving capabilities often meant increasingly challenging configurations and resource demanding deployments.

With pressure from management to show results of major investments in a short timeframe, pragmatic companies are trending to a "sticker book" or "paper on glass" initial approach to expand the user community as fast as possible. This deployment method targets intellectual property protection, knowledge management and collaboration; but puts off workflow, structured data management and other sophisticated features to subsequent phases. Those phases will focus on individual departments and their specific needs. Interestingly, this generic approach was the concept of early ELN systems — the ones that actually failed in the market due to their lack of domain-specificity! But, ELN is more accepted now, and the market has matured to the point where it is a necessary tool for any company who values knowledge preservation and collaboration. As with any market that moves into the conservative phase of adoption, the slow approach is often necessary. ☐

1. Elliott, Michael H. "Informatics Convergence Presents Opportunities and Challenges." *Scientific Computing*, January 2012; [www.scientificcomputing.com/articles-informatics-convergence-presents-opportunities-and-challenges-111111.aspx](http://www.scientificcomputing.com/articles-informatics-convergence-presents-opportunities-and-challenges-111111.aspx)

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