



## **Familiar and User-Friendly: TIBCO Spotfire Owns the Front End in the Life Sciences**

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PERSPECTIVE #HI224558

Alan S. Louie, Ph.D.

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### **IN THIS PERSPECTIVE**

This IDC Health Insights Perspective highlights the use of TIBCO Spotfire in the life sciences as the de facto end-user interface of choice for the strategic assessment of clinical data. It is clear that despite the growth of application-specific dashboards and supporting actionable analytics the foundational use of Spotfire as the common visual interface across life science organizations remains strong, based on its well-designed, highly intuitive user interface and ease in creating active information portals. While application-specific dashboards continue to improve and strongly deliver value for application end users, the use of Spotfire as a multiapplication, common analytical and visualization interface is strengthened by the widespread availability of connecting application programming interfaces (APIs) and the general familiarity with Spotfire by people from across life science organizations.

This Perspective is based on a recent interview with a major pharma thought leader and anecdotal discussions from across the industry regarding different approaches to visualizing both clinical and operational data for key stakeholders across a life science organization.

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### **Situation Overview**

As organizations seek to improve operational effectiveness in the shadow of impending blockbuster patent expirations, they are being increasingly overwhelmed by information overload, making it more and more difficult to select the best path forward. Technology and innovation are helping to improve the situation by eliminating siloed data, improving information connectivity, and helping to automate (and shift into the background) routine information management. We believe that effective organizations are those best able to use available data and information to reduce risk in strategic decision making. These organizations are actively working toward (or have in place) real-time access to key information regardless of its location or source as well as processes to effectively interpret that information.

While the overall corporate strategic vision originates from senior management, the day-to-day execution of that vision is routinely the realm of middle management. Midlevel managers are tasked with overseeing progress at the project or programmatic level based on aggregated data from a wide variety of specific project efforts run by researchers and other staff supporting them.

### ***Simplifying Complexity***

The life science industry is literally drowning in data, an issue that is only likely to get worse as we move into the future. Data is increasingly being produced by emerging and maturing technological innovations (e.g., imaging or whole genome screening) that require highly specific knowledge and complex supporting tools to effectively analyze and interpret results. At the same time, complex data is often viewed through multiple lenses as different researchers apply foundational research data to their own specific projects. Complex statistics are also often applied, producing results that may be difficult to interpret by anyone who is not an expert in the field.

The results generated by ongoing research are only one of the many different types of information generated by life science companies that are regularly used to move organizations forward. Operational data, including comparative analyses of parallel ongoing projects, staff resource utilization, and burn rates are all important measures that help determine whether efforts are on track. For experts in each specific discipline, specific advanced tools are regularly available that enable these people to conduct their work. As data analyses move beyond these focused experts, it often becomes exceedingly difficult for others, including managers, to effectively interpret and use data. This disconnect has the potential to produce erroneous conclusions and drive poor decision making.

Spotfire, as a familiar and common analytical and visualization tool, has the ability to routinely bring together key data from disparate applications to support managers in their efforts to drive progress. While core clinical applications (e.g., Medidata Rave, Oracle Clinical, Aris Global ARISg, or SAS Drug Development) will remain the primary application solutions used to directly support ongoing efforts, Spotfire, as a one-stop access, analysis, and visualization resource, can help managers to be more efficient and effective in their efforts.

### ***Ad Hoc Browsing Made Easy***

Recognizing that users regularly ask a wide variety of questions that cannot be effectively captured using a single standard dashboard, the ability of an analytical and visualization solution to easily allow for customized analysis and data visualization will always be an important product feature. A well-designed solution should be intuitive, built with a clear understanding of underlying processes. An effective tool

should recognize and anticipate workflow paths that closely map to the investigator's thinking, providing simple processes that led the investigator to the right analysis and clear visualization of available data. These workflow paths could be easy to construct and implement to allow for institutionalization of knowledge in support of current and future efforts. As an example, while SAS Drug Development is an extremely powerful tool used to conduct complex analyses of clinical data, it may not be the best tool for managers to routinely review project data and progress. Effective use of SAS Drug Development requires highly specific programming skills that managers don't typically possess, making high-level browsing of clinical data difficult. As an interface designed primarily to enable simple search, filtering, summary analyses, and graphing, Spotfire provides a strong alternative means for managers and investigators to easily browse data without the need to submit queries to IT and wait (days to weeks) for a response.

### ***Fluid Interconnectivity with Best-of-Breed Applications***

While Spotfire has been and will continue to be a powerful industry-independent analytical, modeling, and visualization tool, a key strength in the life science industry is its ability to work effectively with most other core industry applications. Application programming interfaces and other data sharing interfaces that link Spotfire to clinical and other applications are available for most, if not all, commercial applications in use today. These linkages, combined with Spotfire's easy-to-use development tools, allow organizations to rapidly and effectively implement Spotfire as the dashboard/portal of choice for managers looking to monitor and analyze ongoing project and program efforts.

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## **Essential Guidance**

All of the major clinical application vendors have recognized the value that information dashboards and portals deliver to their clients and are actively working to improve their products to provide these features. Comprehensive eClinical product suites look to provide these same features from a broader perspective. Despite these improvements, there remains a need for products like TIBCO Spotfire to bridge gaps and supply flexibility as managers seek to monitor and track progress in their efforts. Familiarity with the platform, easy-to-implement dashboards and other information portals, transparent connectivity, and intuitive designs all help to make and keep Spotfire as the go-to application in its space, a trend that is not likely to change over the next several years.

The need to effectively exploit data in life science companies is complicated by the explosive growth in data quantity, the complexity of both data and analyses, and compartmentalization of data sources. As companies seek to improve operational effectiveness, midlevel

managers are at the strategic front line. Effective access to and timely analysis of available data helps these managers to make better project decisions while reducing overall project risk. Solutions like Spotfire help these managers to succeed, which is why Spotfire is a preferred solution in the industry. With its continued commitment to both improving its industry-specific solution and the strengthening of its statistics capabilities (obtained from its acquisition and integration of Insightful), expect Spotfire to maintain and grow its presence in the life sciences for years to come.

## **LEARN MORE**

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### **Related Research**

- *Best Practices: Actionable Analytics Expands Beyond Formal BI in the Life Science Industry* (Health Industry Insights #HI223754, June 2010)
- *Connecting the eClinical Ecosystem: Moving from Point Solutions to Business Connectivity* (Health Industry Insights #HI222286, March 2010)
- *BI for Drug Development: Oracle Introduces Clinical Development Analytics* (Health Industry Insights #HI220622, November 2009)
- *Technology Selection: The Growing Role for Business Intelligence in Life Science Industry Best Practices* (Health Industry Insights #HI219898, September 2009)

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