

Cool Vendors in Life Sciences, 2011

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This research highlights five vendors that are bringing new tools to yield greater insights into data. Life science companies face enormous challenges in collecting data from research and commercial activities. These vendors provide tools that permit more-flexible access and use of data for research discovery, managing clinical trials, and making decisions to more cost-effectively use resources.

Key Findings

- Life science companies collect vast amounts of structured and unstructured data from clinical and commercial efforts. However, classic business intelligence tools are often inadequate to handle this data in a way that provides value for the enterprise.

Recommendations

- Evaluate specialty analytics tools for their ability to create agility and yield rapid insights into an environment that is exploding with new structured and unstructured sources of data.
- Deploy specialty analytics tactically into your architecture as an adaptable layer to create agility in responding to changes in the data landscape, and leverage their short-term potential to create value. Recognize that these applications may need replacement in two or three years as specialty capabilities become mainstream, and as new technologies displace them with better capabilities.

ANALYSIS

This research does not constitute an exhaustive list of vendors in any given technology area, but rather is designed to highlight interesting, new and innovative vendors, products and services. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

What You Need to Know

These Cool Vendors offer a set of innovative approaches that seeks to bring more value to life science companies. They all demonstrate knowledge of the life science space, have embedded that knowledge into their applications and seek to offer solutions that can leverage data in new ways:

- More-analytical and targeted tools for healthcare practitioner and patient-relationship marketing – Appature
- For a business-user-friendly, flexible and adaptive way of contending with many data sources, and for sharing information – Cambridge Semantics
- For creating and evaluating clinical study plans and budgets, sourcing contract research partners, and tracking resources – ClearTrial
- For bridging the data gap between the provider's clinical world and the life science clinical world – Explorys
- For productivity and insights into complex datasets, such as those found in life science research – Quantum Leap Innovations

Appature

Seattle, Washington (www.appatureinc.com)

Analysis by Dale Hagemeyer

Why Cool: Appature Nexus is the only solution we know for healthcare practitioner and patient-relationship marketing that is designed exclusively for pharmaceutical, medical device and consumer healthcare companies. However, it isn't just about being able to execute campaigns; Appature Nexus is a cloud-based solution that can:

- Create e-mail and survey distributions based on various criteria or actual segmentation exercises from a separate system, or from patients who have "opted in" to receive information from life science manufacturers.
- Personalize content to the recipient.
- Provide feedback on who opened a document that was sent as part of a campaign – and, conversely, who did not.
- Lay across various systems and data sources to leverage them in targeting the right person (patient or practitioner) with the right content. Such sources could be contact center or face-to-face interactions, data from self-service Web sessions, syndicated prescription data sources or any other data source.

Challenges: Appature will have to breathe new life into a relatively stagnant category, because traditional campaign management solutions have been very generic and one-dimensional products that basically execute mass-mailings. Appature, as a small company with limited advertising muscle, has to convince prospects that campaign management is a viable part of a multichannel sales and marketing strategy, that industry requirements like patient opt-in can be met, and that data integration is a critical driver in good campaign execution.

Who Should Care: Sales and marketing executives (and the IT professionals who support them) are under considerable pressure to reach practitioners, who are less and less available, and there are even fewer sales representatives left to call on them. These professionals will need to care about multichannel delivery because it is part of a well-rounded relationship marketing strategy. Many companies are chasing after social media and other new channels, but the more well-established channels are still viable if they provide the right content in a personalized way, and give feedback loops on who is actually reviewing the content. Also, the implications for developing markets (like China) are significant because physicians there are much more open to these kinds of communications, and there are fewer restrictions on patient interactions.

Cambridge Semantics

Boston, Massachusetts (www.cambridgesemantics.com)

Analysis by Steven Lefebure

Why Cool: Cambridge Semantics offers a middleware tool to proactively confront the increasing diversity of internal and external data used by life science companies, to move beyond existing data warehouses with their rigid structures, and to enable business users to interact with data in their own language. This combination enables more value extraction from data, and creates agility in adapting to changing data sources and relationships. New value is generated by creating visibility to new data sources in combination with traditional data warehouse sources, by establishing common meaning across data sources, and by simplifying user interaction with the data. Agility is created from an environment of semantics (data meaning, relationship rules, language and inference rules) that is designed to accommodate unstructured sources and Web sources, as well as structured sources. When applied to life science areas such as drug discovery, research collaboration and sales forecasting, where new insights are needed but are limited by the long and costly data warehousing projects, this tool can provide an essential proactive capability.

Cambridge Semantics offers the Anzo Suite, which provides the capabilities to enable this environment. Semantic understanding of the data is at the core, and means that complex data can be examined in the context of business/user language found in life sciences, that meaning can be incorporated into the data's use via inference, and that relationships between disparate sources of data can be established and flexibly maintained. It also means that common data sources such as Thomson Reuters, geographic data and Web sources can be easily leveraged and integrated within analyses to expand the enterprise's data scope. While the product has many applications, Cambridge Semantics focuses first on research and discovery use cases, and has several major pharmaceutical companies investing in the product.

Challenges: The key challenge will be to find the right business user to champion this analytics and semantic capability. Cambridge Semantics will compete in a rich field of companies offering solutions in research analytics, including many generalized solutions that are applied in this area. It will face competition from larger enterprise players, but it is not broad enough to be an enterprise solution; it will also face competition from specialty players, such as in bioinformatics, but it is not focused enough to be a bioinformatics solution. Therein lies the opportunity to create the niche, but Cambridge Semantics will be surrounded by other players with more traditional standing in supporting analytics capabilities.

Who Should Care: Business functions that are interested in resolving issues associated with incorporating unstructured data into analysis, and that are frustrated by data framed only in technical terms, will be interested in this tool because it empowers business users. Business/research users in research analytics, cross-organization and department data sharing, payer/provider data sources, external data source integration, sales forecasting and clinical trial site data analysis will also find this product useful.

ClearTrial

Chicago, Illinois (www.cleartrial.com)

Analysis by Steven Lefebure

Why Cool: ClearTrial offers capabilities that are crucial to achieving more cost-effective clinical studies and a more open cost dialogue with contract research organization (CRO) partners. ClearTrial enables the creation of more-comprehensive and accurate clinical study plans and budgets that are so elusive to life science companies, which are seeking to reduce costs and increase accountability. The plan created within ClearTrial is a useful instrument for communicating and negotiating with CRO partners on study details, it avoids misunderstandings in expectations, and allows for the implementation of performance-based payments as milestones are achieved. This set of capabilities will be welcomed by life science companies seeking to raise their level of play in study planning and budgeting.

ClearTrial leverages activity-based costing and simulation approaches, supported by an extensive database of region-specific benchmark performance metrics and cost factors that expand a sponsor's depth of knowledge out of the box. These combine in an analytical framework to simulate various study options that allow the clinical development staff to determine the best plan for a study. ClearTrial has three primary products – Plan, Source and Track – reflecting their scope of capabilities to support sponsors in *planning* a study (creating budgets, milestones and estimates), *sourcing* CRO partners for a study, and *tracking* activities and costs incurred during the course of a study. These capabilities are often conducted on spreadsheets, and they supplement clinical trial management system (CTMS) capabilities that do not go deep enough into supporting this need.

Challenges: This is a niche market, and all niche markets face an identity challenge in defining their space. ClearTrial is not a full-fledged CTMS, which is a traditional category that offers some capabilities in this space, but it offers compelling capabilities that exceed those found in CTMS or spreadsheet applications for planning and budgeting. ClearTrial's niche may be overshadowed in a company's decision process when it seeks to simplify architectures with fewer niche applications, or decides to resolve its issues at a broader, bundled capability level, or simply decides to continue with spreadsheets and live with their limitations. In the longer term, ClearTrial's differentiation may erode as the competition in adjacent CTMS and planning categories invests in strengthening its planning/budgeting features.

Who Should Care: Life science manufacturers that aspire to improve clinical study performance, that struggle to plan and deliver clinical studies on budget/plan, and that struggle to negotiate CRO relationships without facts and insights into the potential implications of a study will be interested in ClearTrial. Clinical operations, outsourcing and finance departments will be the primary users of this application at life science companies. CROs will find the application's potential to establish a more trusted relationship with sponsors to be a potential advantage that is worth exploring.

Explorys

Cleveland, Ohio (www.explorys.net)

Analysis by Steven Lefebure

Why Cool: Explorys has built a cloud-based ecosystem of provider, life science and claims data that can provide valuable insights for many life science areas: patient recruiting for clinical studies, identification of economic and clinical outcomes, and drug safety. Explorys is bridging the gap between clinical activities occurring in the healthcare provider world and the life science research world by providing data and analytic tools that have the potential to realize translational medicine benefits. This cloud-based ecosystem can also serve as a platform for collaboration and application/tool development across traditional healthcare industry sector boundaries.

Explorys works with providers to assemble and cleanse clinical data, map data across sources, “anonymize” patient information and normalize terminology used to describe treatments, drugs, diagnoses and measures. As such, it links to electronic health records as well as financial, operational and other data sources that represent clinical, inpatient, critical and ambulatory care activities. The resulting product goes beyond the value of the sum of the data parts to create a neutral, cloud-based platform infrastructure that contains clean, high-quality data that becomes an engine for pharmaco-economic analytics. Early adopter customers include top-10 pharmaceutical companies focusing on Explorys’ research and forecasting abilities.

Challenges: Establishing a new syndicated data source is risky because significant investments need to occur to acquire, store, translate and rationalize the data before potential buyers can be assured that it is of sufficient quality to leverage. Additionally, because the data sources involve provider clinical data, many concerns will be raised over the privacy and protection of the data, whether the risks are real or imagined. Due to these factors, Explorys will face startup and new entrant risks as the healthcare industry landscape changes.

Who Should Care: Research and clinical study teams will have a primary interest in using this platform as a means to gain insight into disease factors, clinical and economic efficacy, target patient cohorts and recruiting. Medical and commercial teams will be interested in the data for safety issue identification, comparative treatment studies and treatment behaviors.

Quantum Leap Innovations

Newark, Delaware (www.quantumleap.us)

Analysis by Steven Lefebure

Why Cool: Quantum Leap Innovations is bringing a new level of data analytics and flexibility to life science research organizations by assisting researchers in the process of identifying patterns in data, and is doing so by robust analytics and productivity-boosting insights. Growing from a background in government sectors, where new analytic approaches were needed to approach complex and data-rich problems, Quantum Leap Innovations is expanding into life sciences with advanced analytics products that are designed to do some “heavy lifting” in pattern and relationship identification among data components.

The product suite is called LeapWorks, and it is designed to scale to and integrate with the large, diverse databases that are typical in life sciences. Quantum Leap Innovations approaches advanced analytics through the paradigm of Pattern Based Analytics, which automates the discovery of complex (multidimensional) patterns in large datasets to provide unique insight, prediction and hypothesis generation. While researchers will appreciate the user-friendly ability to interactively explore multidimensional factors and targets, the research organization overall will appreciate the potential productivity boost, and the additional insights possible in mining existing data assets for patterns. Beyond pattern recognition, LeapWorks enables the creation of predictive models and hypotheses based on the discovered patterns in the data. This “one-two punch” of discovery and prediction is essential for the development of next-generation innovations in medicines. In the life science space, early adopters have been academic health systems.

Challenges: While life sciences is not entirely new to Quantum Leap Innovations, entry into life science research circles will be a challenging task due to strong, entrenched legacy competitors and research organizations that are seeking to reduce costs and simplify architectures by reducing applications. Quantum Leap Innovations will need to differentiate its unique capabilities as complementary to established discovery analytics players, and build its niche in an area that is rich with innovations in visualization, 3D and simulation.

Who Should Care: Research organizations seeking a capability to assist researcher productivity in data analysis, and seeking to discover unique and differentiating patterns in new and legacy data. The software is well-suited to “metastudy” problems. Research organizations include life science manufacturers, academic research institutions and research hospitals. Life science companies will find that Quantum Leap Innovations’ product has potential benefits beyond drug research and development, such as identifying customer purchase patterns. Other industries outside life sciences with the need to detect patterns in complex data will also be interested in leveraging LeapWorks’ capabilities.