ACCELERATE SCIENTIFIC DISCOVERY
WITH ANZO®
A SEMANTIC LAYER FOR THE SCIENCE-DRIVEN BUSINESS

SUMMARY
Science and innovation driven companies are facing a data deluge, with vast amounts of disparate data in different formats generated along the R&D pipeline. Scientists and business analysts lose time trying to locate and understand the data as they attempt to answer crucial questions and support key decisions. The Anzo® automatically creates a Semantic Layer that understands the meaning and relationships of all the data in any format, and enables rapid, on-demand access to answer scientific and business questions and support smarter and faster decisions for better insight and accelerated business execution.

THE CHALLENGE
Material science companies are expanding their research portfolios and at the same time generating unparalleled volumes of data. Scientific data is everywhere and in multiple structured and unstructured formats – e.g. research data in ELNs assay results in Excel spreadsheets, QA/QC runs in LIMS, SharePoint, etc. – so posing a question to support a decision, test a hypothesis or explore a new insight forces a scientist or business user to first locate the right data source, understand its format and terminology and link it with other relevant sources. This delays – or in some cases prevents – getting to a comprehensive answer in a timely way and slows R&D progress, ultimately impacting new product delivery/development and revenue.

In the push to develop safer, more sustainable products sooner, researchers and business users need to be able to exploit the totality of their enterprise data assets, no matter where the data is held, or in what format.

For example, quickly investigating and responding to the detection of a contaminant or a reduction in expected yield in a downstream production run of a candidate might require rapid access to analytical data, physical sample provenance and location data, scale-up process documentation, and instrumentation calibration status. Searching across these disparate data silos with traditional tools and then attempting to stitch the answers together is an almost impossible task, and likely to take days and weeks, thereby delaying a crucial next step in the R&D pipeline.
Anzo® enables scientists to flexibly search, navigate, correlate, and analyze all scientific data assets, including structured and unstructured data locked away in ELNs, LIMS, QMS Systems, SharePoint, spreadsheets, Word documents, PDF files, and other enterprise applications, for faster and more insightful discoveries. Anzo automatically ingests source documents, files, and other content, and creates a semantic layer that understands the meaning and relationships of every enterprise information asset from every stage of the R&D pipeline.

Anzo then makes the data readily accessible to researchers, data scientists, and business analysts using industry-specific language and terminology. The system supports ad hoc and canned queries, and can present key data in dashboards for rapid scanning and assessment, or passing to other analysis and visualization tools. Anzo also supports rapid, accurate, provenance-rich reporting, and flexible execution and integration within an enterprise informatics infrastructure. Anzo understands science, operates with unmatched speed at big data scale, uses open standards and provides robust security, lineage, governance and provenance. Companies that use Anzo report substantial time-saving over using traditional searching techniques to locate, analyze, and report disparate data, and the ability to ask previously unanswerable questions, so that researchers can spend more time doing science and the business can gain deeper insight and drive critical decisions and actions faster.

ABOUT CAMBRIDGE SEMANTICS
Cambridge Semantics Inc., is a big data management and enterprise analytics software company that offers a universal semantic layer to connect and bring meaning to all enterprise data. Its software, the Anzo®, allows IT departments and their business users to semantically link, analyze and manage diverse data whether internal or external, structured or unstructured, with speed, at big data scale and at the fraction of the implementation costs of using traditional approaches.

Cambridge Semantics is based in Boston, Massachusetts. For more information, visit www.cambridgesemantics.com or follow us on: