

Chemicals Company: Ontology Development

With a successful 200-year track record in developing extensive and diverse product lines by leveraging chemistry and science, this global innovator was embarking on a new era of discovery to shape a better world.

Categorization of products and the relationships between those named entities were difficult to describe in traditional taxonomies and “systems of systems”. Over the course of 2 centuries massive amounts of complex information had been arrogated, however it didn't give a full picture. The patterns of data intersection for decision making were lost within the siloed systems. For greater predictable business insights based not only on structured data but unstructured documents the need for easier access and interoperability was a primary goal.

A CoE (Center of Excellence) was formed to accelerate R&D development, analytics and finding of data to advance innovation with greater speed and reliability. A secondary mission was to socialize this capability to the broader community. Ontology development and tools to harmonize information were a foundational part of this data enrichment strategy, but in-house skills and data-centric modeling expertise were insufficient. It was necessary to develop as a core competency.

Semantic Arts consultants were engaged to bridge this critical ontology and semantic capabilities gap. Our strategic advisory service offering brought over 25 years of practical implementation learnings and educational workshops to deliver a series of focused topics that met broad expectations of a teaching library. Recorded videos are now available on the company's enterprise intranet to traverse the complexities of information silos by enabling knowledge graphs, ontologies, and data-centric thinking.

Topics include - *Introducing Semantic Technologies and Ontologies, Introduction to OWL, Introduction and Hands-on with Protégé and Property Rules, Understanding Class Relationships, Expressions, and Property Restrictions, Semantic Triple Visualizations, Ontology vs. Taxonomy, Topic Extraction and Weak Signals, and UI Visualization with Knowledge Graphs*

In parallel Semantic Arts are engaged with a division focused more on enriching and unifying 19 different data repositories into an ontology. The goal is to model relationships between the concepts, substances, and components for describing the products in a dis-ambiguous manner to eliminate data duplication, increase metadata clarity, and eventually incorporate ML and NLP capabilities. We're collaborating with the client to structure a roadmap for implementation. A projected iterative, agile approach by using our predictable (rinse and repeat), Think Big / Start Small methodology will be employed to guide and instruct in this digital evolution.

This effort to interconnect information assets for discovery complements and aligns with the broader digital transformational for bringing “miracles of science” to realization.

Contact Us:

Overcome integration debt with proven semantic solutions.

Contact Semantic Arts, the experts in data-centric transformation, today!

[CONTACT US HERE](#)

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