An Enterprise Knowledge Network

Knowledge exists in many forms inside organizations – ranging from tacit knowledge which exists only in the minds of the users who possess it, to codified knowledge stored in databases and document repositories, and including previously undiscovered insights waiting to be mined from unstructured data or relational databases using Big Data, Data Mining Machine Learning / Deep Learning, and Artificial Intelligence techniques. All organizations rely on the generation, capture, use, sharing and reuse of knowledge in order to coordinate activities within the firm, and in order to learn as a firm.

Unfortunately while knowledge exists throughout the organization, it is often not easy (if even possible) to locate, use, share, and reuse existing knowledge. This results in a situation often described as "the left hand doesn't know what the right hand is doing" and damages morale as employees spend their days frustrated and complaining that "nobody knows what is going on around here".

The obstacles that hinder access to existing knowledge can be cultural, geographical, social, and/or technological. And while no technological solution can guarantee perfect knowledge-sharing, an Enterprise Knowledge Network provides the technical foundation to support high levels of knowledge transfer and reuse, and to support organizational learning and coordination.

Using technologies developed as part of the Semantic Web initiative, and applying the principles of Linked Data within the enterprise, our Enterprise Knowledge Network approach can help your firm integrate and aggregate knowledge which is spread across your existing enterprise applications and content repositories, as well as difficult-to-capture tacit knowledge. Our solutions feature the automatic extraction of semantically meaningful knowledge and concepts from unstructured and semi-structured data, as well as supporting the extraction of semantic meaning from records in relational databases.

Linking data across the enterprise using Semantic Web technology allows users to locate contextually relevant knowledge related to any content, task, or application. A Social Networking platform which automatically mines concepts from user activities supports the capture of (some) tacit knowledge, and makes it possible to quickly identify other employees with related interests and relevant knowledge, and identifies possible collaborators – even if the employees in question do not know each other, or have never met.   Text Analytics and Machine Learning facilitate extracting meaning from external content repositories and news sources, followed by integrating this knowledge with your own internally generated knowledge, in order to expose key connections and insights.

By constructing a semantic integration layer using RDF, RDF/S, OWL, FOAF, Dublin Core, SIOC, and other industry standards, along with your own custom ontologies, it becomes possible to link data and mine knowledge, from across the entire spectrum of applications and repositories.

Contact Us

If your firm is struggling with issues related to the creation, sharing, capture and reuse of knowledge, or with collaboration, innovation and coordination within your organization, let us help. Our Fogcutter Suite includes the products necessary to implement an Enterprise Knowledge Network which integrates knowledge across all of your enterprise applications and content repositories, as well as other internal and external knowledge sources. We can help you build bridges between the silos within your firm, which inhibit the free flow of knowledge and hinder effective collaboration and innovation.

In addition to our own Fogcutter products, we develop custom solutions using a broad range of well known Open Source software components, including:

- Apache Jena, Stanbol, Fuseki and Marmotta
- Apache Mahout
- Apache Nutch, Lucene and Solr
- Apache Hadoop, Spark, Storm, Hive, and Pig
- Apache OpenNLP, Tika and UIMA
- Apache Camel and ServiceMix
- PostgreSQL, CouchDB, and Cassandra
- Apache Giraph
- Prolog
- R
- Groovy and Grails

For more information, email info@fogbeam.com or call us at 919-265-4489.