Enterprise Knowledge Discovery for Oil and Gas

Increase Production, Streamline Operations and Reduce Engineering Time by Discovering and Repurposing Enterprise Knowledge
The oil and gas industry faces a myriad of complex and critical business challenges, including fluctuating oil prices, rising capital costs, fierce competition for resources, an aging workforce, increased government regulations, and growing demand for sustainable development and energy efficiency.

Concurrently, operating cost pressures are driving the need for greater productivity out of engineering resources. This is pushing oil and gas companies to better tap and leverage technical knowledge in order to maintain safe, efficient, and reliable operations while boosting innovation and profitability.

Knowledge Challenges Loom for the Oil and Gas Industry

The industry must counter significant challenges in its quest to find and repurpose decades of valuable knowledge and information:

– **Knowledge “lost” in shared drives and enterprise systems.** Finding and accessing information stored in repositories scattered across an organization is difficult at best. Yet this knowledge is critical in an increasingly complex environment, where information from past projects is often buried in decades-old, non-integrated enterprise systems. In fact, engineers can spend 40% or more of their time searching for answers across the enterprise instead of solving problems.

– **Knowledge loss due to an aging workforce.** Second, nearly 75% of the oil and gas workforce is 50 years of age or older and roughly 50% of oil and gas engineers will be eligible for retirement in the next few years. Upon retiring, these engineers will take decades of domain knowledge with them. Companies are scrambling to address the knowledge and experience gap created by an aging workforce, layoffs and acquisitions and to quickly knowledge-enable the next generation of engineers.
Using Enterprise Knowledge Discovery to Answer Questions and Solve Problems

Enterprise Knowledge Discovery by IHS Markit arms engineers, engineers, geologists, geophysicists and other technical workers with a single source of critical technical information and insights that they need from across the enterprise, and in the context of the problems they are trying to solve.

Delivered via the IHS Engineering Workbench, Enterprise Knowledge Discovery helps engineers and technical staff locate the specific valuable information they seek across a multitude of internal and external databases and content formats.

Dedicated to fulfilling engineers’ needs, Enterprise Knowledge Discovery:

- **Is powered by a Unique Search Technology** – Patented technology enabling research, analytics and trends. Mine internal, external, personal, and trusted third-party content repositories - preserving best practices, lessons learned, and promotes reuse of project and knowledge assets across a global team. Enterprise Knowledge Discovery unveils answers that are hidden within documents regardless of location, document format, or even language of authorship. Engineers can mine relevant insights held within a wealth of internal and external content sources to accelerate research, design, and development.

- **Augments and leverages investments in Existing Knowledge Management** – Enterprise Knowledge Discovery does not replace existing knowledge management investments but enhances them. Maximize returns on PLM, enterprise search, and SharePoint deployments

- **Utilizes a Lightweight IT Footprint & Rapid Deployment** – Designed from the ground up to have a lightweight and flexible IT footprint. An internal server can be set up and crawling internal content in just hours. OOTB connectors to common repositories and decades of experience in the engineering domain.

Leading oil and gas companies use Enterprise Knowledge Discovery to:

- More rapidly develop new and improved processes to retrieve and process reserves
- Reduce costs and improve operations for better ROI on capital assets, sites, and technologies
- Mitigate loss of graying workforce through capture and reuse of internal expertise
- Enhance technology solutions to stay ahead of competitors and deliver greater differentiation
- Minimize risks by ensuring compliance and not repeating past mistakes
Enterprise Knowledge Discovery saves time by giving engineers fast access to the answers and insights they need — cutting research time by a third. Enterprise Knowledge Discovery helps reduce engineering costs by:

- Reducing schedule delays by targeting the single biggest use of an engineer's time – searching for information.
- Transferring knowledge effectively to more junior engineering staff, new project, and program members; hedging against knowledge loss and slow ramp up.
- Minimizing risk by finding tried and true solutions vetted internally and avoiding duplication of effort.

Oil and gas companies are looking for ways to be more efficient. Advanced knowledge discovery technologies can collapse years or months of research into days or hours. By leveraging IHS Markit’s Enterprise Knowledge Discovery, organizations can take advantage of next-generation research technology to analyze problems, ask questions, and extract critical answers. This single-point access to engineering, technical publications, and relevant content accelerates research time by up to 30 percent, solve problems faster by looking beyond your industry for answers, increase engineering efficiency by reducing design cycles, and maximize value of proprietary knowledge sources.

About Engineering Workbench

IHS Engineering Workbench™ is a breakthrough solution for accelerating technical research, problem-solving and innovation by providing engineers with unified access to internal and external technical knowledge, paired with analytical tools. With a modern, intuitive interface and next-generation search technology, Engineering Workbench allows engineers to easily find the information they need in standards, eBooks, patents, journals, and similar third-party content from vetted, trusted sources. Engineering Workbench also connects engineers to internal knowledge from disparate, unstructured sources such as shared drives, intranets, PLM and more. Analytical tools overlay this integrated content, allowing engineers to solve problems faster and deliver greater competitive advantage.

About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world’s leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.