

CASE STUDY

Australian
Petroleum
Exploration
and Production
Company



Customer

This company is the pioneer of the LNG industry in Australia and the largest Australian natural gas producer. They have a global portfolio and are recognized for their world-class capabilities as an integrated upstream supplier of energy. They focus on creating an integrated LNG production centre on the Burrup Peninsula. Building on more than 30 years of operations in Western Australia, they are progressing development of the Scarborough and Browse gas resources. Their operated assets are renowned for their safety, reliability and efficiency and they have a strong track record in project development. As Australia's premier LNG operator, they produce 6% of global LNG supply.

Challenge

This company had two major productivity problems. The first applied to their entire employee base as all users were facing difficulty finding the information they needed to do their jobs. They often needed to figure out if information existed, and if it did, they needed to know which system(s) it existed in. This was especially a problem with information that was older than a year.

The second problem affected platform and field workers who were tasked with ensuring the systems continued to run, and if they broke, they need to repair them quickly. This was made even worse as the inability to find information directly resulted in delays to repairs that impacted production. Employees were then either recreating materials that already existed, or spending valuable time trying to figure out solutions that had already been developed and documented and could have been leveraged if they were found.

Solution

The vision developed jointly between BA Insight and the customer was to connect the many systems that contained critical information into a single index and implement a conversational "bot" user interface that

interacts with employees and, based on their queries, provides information they needed based on all the information available within the index. The search engine used was Elasticsearch, and it was combined with a bot framework and proprietary configuration to create a truly conversational bot interaction experience.

The implementation included the following connectors:

1. Documentum
2. SharePoint On-premise
3. SharePoint Online
4. One Drive
5. FileShare

Each connector populated content into the central Elasticsearch index and provided support for per-item security, ensuring that the bot would never present any information to a user that they were not allowed to see. In addition, hundreds of common questions with answers, and problems with solutions, were developed and added to the bot interface to provide a starting point for the roll out.

Outcome

The solution was rolled out company-wide and was a resounding success, evidenced by the reduction in fix times and increases in positive feedback from employees. They continue to increase the problem-solving capability of the bot daily, utilizing the access to all company information via the Elasticsearch index that is populated by the BA Insight connectors. Employees report that they can readily find information they need when they need it and continue coming up with suggestions for improvement.