

Case Study: Asian American Coal Inc. (AACI)

Asian American Coal Inc. (AACI), through its joint venture company, Shanxi Asian American-Danling Energy Co. Ltd. (SAADEC) received a business and mining license from the Chinese government for the development and operation of a 170 million metric tonnes, which is known as the Daning Coal Mine Project and is one of the first coal mining licenses to be issued to a foreign direct investment company in China. The underground coal project is located in China's Shanxi province, 370 miles southwest of Beijing.

SAADEC, a joint venture company, was formed in May 2000 and brings together an assembly of talents and technology for the purpose of successfully mining a 4.5-meter thick, premium-grade, low-sulphur coal reserve. Daning has been designed to produce approximately 4 million tonnes of coal annually employing western mining technology.



The Brief

When discussions began with management of Daning project in May 2003, they had exhausted all their standard avenues of system providers and were faced with running a 4,000,000 tonne a year project using manual systems, and translators to operate and maintain the mine's infrastructure. There is no shortage of local people available willing to work for the mine, however harnessing the labour force efficiently in a safety critical environment did not prove so simple, particularly with language issues compounding the complexities of trying to accurately relay commands down the chain of command (let alone feedback up the chain) without encountering the infamous phenomena known as "Chinese whispers". It is this backdrop that presents a minefield of issues for the American personnel imported to manage operations and maintenance functions of the Daning coal mine and protect a US\$84 million dollar investment.

Some of the main issues the language barrier presented to the mine management included:

- No management feedback to production issues or historical analysis of production figures. Inability to determine up to date production statistics and the necessary business information to debug the mines production issues.
- Work management for a large disparate work force operating in different languages. Manual systems were not able to keep up with information flow, which includes the need to support sophisticated, modern mining equipment and the need to comply with the manufacturer's warranty compliance issues. Daning site required a works management system to manage the mine infrastructure.
- The site has a limited number of imported, highly paid personnel to manage a large work crew that do not understand English. Shortage of interpreters to help bridge the language gap severely hampered the scalability and efficiencies of running this site. Also interpreters add a significant cost, because they are in high demand and relatively expensive thus raising the cost base of operations.
- Management KPI reports were limited, manually compiled, and unreliable in delivery time and often dated with a high degree of uncertainty. Management decisions that relied on this information had to read between the lines and at times had to make some educated guesses.



Business Benefits

Daning's management had everything to gain by implementing a translingual EAM system. PBS5 TransLingual assisted this joint venture company with the following business benefits.

On Daning site, American engineers can work with a specific work order printed out in English, along side his Chinese work crew, who have the same work instructions printed in Chinese. A limited amount of Chinese American engineers can now direct a crew in a very specific manner.

Site's maintenance strategy was jump started by using Australian engineers to setup the system hierarchies, procedures and maintenance strategy. Decades of industry experience were used to minimize the pit falls and maximize protection of high cost capital equipment.

Communication, accuracy, expenses and employee involvement are greatly enhanced by the TransLingual capabilities of the system. High cost, English speaking, imported site resources can leverage their efforts by using language services that are managed by PBS5 – all information is presented to the workforce in their native language. Work approval, issue, control and feedback now happen transparently, without the need for translators. KPIs are now TransLingual so that everyone is seeing the same goals, with production and KPI reports, which can be run from either America, or China in the user's native language.

Methodology is a key to success, and Australian engineers, setup the site to use a Production driven methodology that enables management to monitor production output, production performance, identify bottle necks and provides drill down KPI reporting. Chinese crews maintain system data and reports are available in both languages.

Operational cost are further reduced by the implementation of Rotable Assets tracking option that now manages the tracking of costs, location, history and status of high cost assets on site and is enabling the site to minimize their insurance spares holdings.

Online, drill down Management reports that are available not only facilitate the strategic management on site, it also serves to inform both the American and Chinese investors in their own language. Investor confidence and management's kudos is very high.



Summary

Danang site demonstrates how language issues have the potential to limit the effectiveness of a low cost labour force. Sites are faced with the need for relatively expensive translators and/or people employed on the basis of the language skills rather than their engineering skills.

Management of multinationals or joint ventures are empowered with a tool that delivers online information without compromising the low cost base labour resources. Without accurate information, management is flying blind or with a limited field of vision, leaving management open to pit falls that may exist.

PBS5 offers the market something new! Companies competing on the world stage have the opportunity to realize synergies not otherwise available, increase efficiencies and surge past the competition.

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