Yangtze Power Improves Business Intelligence with Integrated Database and Analysis Tools

China Yangtze Power Co., Ltd
Beijing, China
www.cypc.com.cn

Industry:
Utilities

Annual Revenue:
US$1.2 billion

Employees:
2,100

Oracle Products & Services:

Oracle Database
Oracle Business Intelligence Suite Enterprise Edition
Oracle OLAP
Oracle Data Mining
Oracle Warehouse Builder

"We have experienced significant improvements in the standard of management after implementing an evaluation system that leverages an Oracle database and business intelligence tools. We can now analyze our performance in depth and address any problem areas." – Li, Wei-Bing, Manager, Information Management Department, China Yangtze Power Co., Ltd

China Yangtze Power Co., Ltd is China's largest publicly listed utility. The China Three Gorges Project Corporation established the organization in 2002 to oversee hydropower plants created as part of China's massive Three Gorges Dam project. When completed in 2011, the dam will be able to generate 22,500 megawatts of electricity, making it the largest hydro-electric power station in the world by capacity. Yangtze Power currently manages the Gezhouba Power Station and six commissioned generating units.

To prepare for the expansion of its business, Yangtze Power embarked on projects to improve its infrastructure, systems, and management practices. In 2007, the company launched a new database based on Oracle Database 10*g* and introduced Oracle business intelligence tools. Both solutions have enabled senior managers to regularly analyze performance, highlight areas for improvement, and monitor the results of business strategies. In addition, communication between departments has improved as staff have access to a single database that stores enterprise-wide information. They can also generate a range of reports tailored to their specific needs or areas of interest.

The Need for an Integrated Information Resource

Yangtze Power relies heavily on technology to support smooth operations. Each department had maintained systems to support their operations. Information was held in disparate systems, preventing other business units from leveraging the data for analysis. To gain a coherent view of its operations, Yangtze Power had to consolidate data from these systems, a time-consuming task that hindered timely decision-making during critical periods.

Published March 2008

Key Benefits:

- Migrated 10 disparate information sources into a single, integrated database
- Enabled the previous day's data to be available by 9 a.m. the following day
- Provided users with the freedom to create reports and charts tailored to their specific needs
- Supported fast, informed decision-making
- Provided management with an enterprise-wide view of operations

The company decided to migrate information from these systems into a single, integrated database, allowing staff to easily access data from across the organization when compiling reports. The database could deliver a complete and accurate snapshot of the company's activities, ensuring managers had a full understanding of the impact of their decisions.

In 2007, Yangtze Power created a new information management system based on Oracle Database 10*g*. The database interfaced with 10 systems, including finance, human resources, contract management, power generation management, and safety and control management. Yangtze Power also linked the database to the key performance index (eKPI) system. The database went live in November 2007.

Greater Business Insight

In the past, each department used a basic information retrieval and reporting system that did not provide a full picture of the organization's operations. If staff members needed information outside their area to supplement their analysis, they had to phone or email colleagues in the relevant department to send the data.

Today, users can access the Oracle database to retrieve the information they need at the push of a button. The previous day's data is available for use by 9 a.m. on the following day. In addition, the Oracle database stores three years' worth of information, enabling managers to draw on historical data when analyzing business performance using the eKPI system.

Managers use Oracle business intelligence tools to create customized reports and charts, including broken curve diagrams, histograms, pie charts, and radar maps. The wide range of reporting and display formats enables deeper analysis of the organization's business performance. This has enabled Yangtze Power to adopt an accurate, structured, and fact-based approach to decision making.

"In the past, staff could only access a limited range of reports and information sources," said Li, Wei-Bing, manager of the Information Management department at China Yangtze Power. "The Oracle database and related business intelligence tools have given users the freedom to create their own reports, ensuring they have the knowledge they need to improve their performance and make effective decisions."

Published March 2008

Future Plans

Phase two of the project involves expanding the scope of users who have access to the database; enhancing the database to improve data quality and integrity; providing additional functionality; and driving increasing awareness of the solution to prompt greater uptake.

Why Oracle?

Yangtze Power began searching for a database and business intelligence solution in September 2006. The company evaluated products from Business Objects, Cognos, Informatica, Microstrategy, and Oracle. According to Li, Yangtze Power selected Oracle because the vendor offered an integrated solution.

“The other products we evaluated offered either business intelligence or extract, transform, and load (ETL) capabilities, but not both,” he said. “Only Oracle could deliver a solution comprising a database, business intelligence, and ETL capabilities.

“We were already using Oracle Database in our core business system so we were familiar with the product and its functionality,” Li added. “Oracle products are easy to integrate and software maintenance is not an issue. For example, the ETL functionality embedded in the Oracle database simplifies the ETL process and makes it easy to manage data.”

During the evaluation process, Yangtze Power asked vendors to provide a proof-of-concept based on its requirements. According to Li, Oracle’s solution was way ahead of its competitors.

“Oracle responded very quickly and produced a solution that met data visibility, security, reliability, and flexibility needs,” he said.

Implementation Process

The implementation kicked off in March 2007. In the early stages of the project, Yangtze Power undertook needs analysis and data preparation. The company ensured the solution was thoroughly tested and refined before the November 2007 launch date.

Yangtze Power had earlier defined the requirements for the eKPI system, which covered six major areas including power generation management, business management, finance, human resources, inventory, and integrated reporting. The system would

Published March 2008

include 65 performance indices and 370 reports. The related systems and data sources had already been prepared, and all that was needed was to integrate these elements into a single platform. This sped up the implementation process.

"The success of the project reflected the close collaboration between the teams: Oracle, the program developer YiChang JFS, and our internal IT staff," said Li. "These three parties made large investments in terms of manpower and other resources, including specialized IT training and skills transfer."

China Yangtze Power Co., Ltd is China's largest publicly listed utility. The China Three Gorges Project Corporation established the organization in 2002 to oversee hydropower plants created as part of China's Three Gorges Dam project.

Published March 2008