BP Exploration and Production Migrates to a New Business Intelligence Platform

Overview

Country: United Kingdom
Industry: Mineral Extraction

Company Profile

The Exploration and Production (E&P) segment of BP, one of the world's largest petroleum and petrochemicals companies, has offices in 26 countries.

Business Situation

BP E&P needed to upgrade its GFO forecasting and planning system to give its financial analysts more timely access to information through the corporate intranet.

Solution

Altius Consulting - BP E&P's consulting partner for this important project - recommended Microsoft® SQL Server™ 2000 and Microsoft Analysis Services Business Intelligence platform with arcplan dynaSight for web-based reporting and analysis and XLCubed for ad hoc reporting via Microsoft Office Excel.

Benefits

- Saves $100,000 in annual maintenance charges
- Improves controls and audit trail
- Enables faster, more flexible Group forecasting and planning via the corporate Intranet
- Ease of integration with back-office applications

"We particularly like the tight integration with Microsoft Office for our monthly financial reports to the E&P Management Team. Previously, we had to print off tabs in 65 Excel workbooks, but now the information can be distributed as a Word document through the e-mail system or read online."

Graham Yerbury, Senior Financial Analyst, BP

BP plc, one of the world's largest oil and gas businesses, needed to provide its financial analysts in Exploration and Production (E&P) with a more effective Group Financial Outlook (GFO) process. The GFO process is a fundamental 'in year' planning process within BP; enabling the business to anticipate and manage any deviations from plan in advance of them occurring. Its existing GFO process was very spreadsheet-dependent and labour-intensive to prepare each month. With the need to turn information around in a few hours rather than days, BP E&P decided to invest in a Microsoft® technology based GFO solution. Altius Consulting, a Microsoft Certified Partner firm, worked closely with E&P senior financial analysts to replace the existing GFO system with Microsoft SQL Server™ 2000 for relational data storage and Microsoft Analysis Services for multidimensional analysis. Together, they provide the necessary relational and On-line Analytical Processing (OLAP) components for a fully-integrated Business Intelligence (BI) solution accessible by E&P's analysts located around the world. The project has been so successful that the BP implementation of SQL Server 2000 and Analysis Services has been adopted by BP's joint venture company in Russia, TNK-BP, where it is proving to be equally successful.

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>
> David Anderson, Principal Consultant, Altius

Situation

Providing accurate and timely forecasting and planning information is essential in the Exploration and Production (E&P) segment within BP. Market prices of oil and gas can and do fluctuate widely. Production levels and resource requirements are under constant review.

BP's financial analysts need to have access to information across a wide range of metrics including financial, production, resources, and pricing. Information is updated regularly and quickly.

BP became acutely aware of the need to find a solution to replace its ageing OLAP based GFO solution which was not as flexible and scaleable as it needed to be. Having looked at competing options from Hyperion, Oracle, and Microsoft®, BP turned to Altius Consulting, a Microsoft Certified Partner, for advice as to what solution they recommended given BP's need for rapid information turnaround and low cost of implementation and maintenance.

Graham Yerbury, Senior Financial Analyst, BP said: "We had an existing OLAP product, and in 2001 built a systems infrastructure around it for a local audience. Everyone who used it was in the same building, but within 12 months from implementation we needed to extend the system to a broader audience and distribute it through the BP intranet. Unfortunately, the product we had did not give us a robust or scalable enterprise solution."

BP wanted to provide up-to-date data to its offices in Hong Kong, Houston, Buenos Aires, Aberdeen, and London to ensure that the analysts could access information at the same time. Using a file based work around in its legacy system, Yerbury felt that there was a high likelihood of information being 'out of synch'.

Solution

Altius recommended the new GFO solution be based on the Microsoft Business Intelligence platform using Microsoft SQL Server™ 2000 and Microsoft Analysis Services as the data storage and analysis engines. In addition, arcplan dynaSight was recommended as the web-based reporting and analysis tool.

arcplan is a Microsoft Gold Partner firm and leader in web-based reporting and analysis tools. dynaSight provides users with a user-friendly way to navigate around their business information environment and gain a solid understanding of where their business is doing well and could do better. Features such as drill-down and up, traffic lighting and graphs make arcplan a very intuitive environment for BP's analysts to work in.

For ad hoc reporting and analysis, Altius recommended XLCubed, a Microsoft Office Excel Add-In that enables users to create reports 'on the fly' utilising the power and functionality of Excel and Analysis Services.

In the Business Intelligence marketplace, Altius has a strong relationship with Microsoft. David Anderson, Principal Consultant, Altius said: "Microsoft has changed the price profile for OLAP technologies for good. Companies can now gain access to OLAP and relational database technologies for a fraction of the cost of just a couple of years ago."

Microsoft Analysis Services is totally integrated with Microsoft SQL Server. Together these products have provided BP E&P with the necessary components for a fully integrated BI solution. arcplan dynaSight produces reports and graphics that easily export to Microsoft Office products; the tool is extremely easy to use.

"To us, the Microsoft Business Intelligence platform with arcplan dynaSight and XLCubed provides an excellent performance management tool kit. We are keen to extend its use beyond the Exploration and Production segment. We designed our implementation for it to be portable and to suit other business units within BP."

Graham Yerbury, Senior Financial Analyst, BP

Graham Yerbury added: "dynaSight is a very robust enterprise application that fits in well with our Intranet. We particularly like the tight integration with Microsoft Office for our monthly financial reports to the E&P Management Team. Previously, we had to print off tabs in 65 Excel workbooks. Now the information can be distributed as a Microsoft Office Word document through the e-mail system or read online."

Benefits

Paperless Reporting for Management Information

Financial analysts in BP's Exploration and Production segment now have online reports produced in minutes, which previously took half a day to prepare and distribute in hard copy format.

Yerbury commented: "Whereas previously, we would have distributed all the reports by between 12:00 and 13:45 we now manage this by 09:30. The key benefit for us is the suitability of the product for an enterprise of our size. It is a secure tool and easy to control."

Lower Total Cost of Ownership

Ease of development and compressed timescales are two key strengths of the Microsoft Business Intelligence platform. What would take six elapsed months with older generation BI technologies took less than three elapsed months to deliver. In addition, arcplan dynaSight and XLCubed both enable users to develop their own reports without the need for programming skills.

Yerbury commented: "The cost per user is significantly lower than our previous solution. Implementing the Microsoft products has saved us around $100,000 in annual maintenance costs. Cost reduction wasn't the only consideration but it is a 'nice to have.'"

Ease of Integration

By standardising on SQL Server and Analysis Services, BP E&P now find it much easier to choose from a range of compatible third-party tools, because of the ease of integration with Microsoft technology. Altius expects a number of solution-specific applications to be developed using the Microsoft .NET Framework, the .NET Framework is an integral component of Microsoft Windows® operating system that provides a programming model and runtime for Web services, Web applications, and smart client applications. BP is now in a position to take advantage of these leading technology developments going forward.

The use of SQL Server and Analysis Services has enabled BP to build a system, which is much less vulnerable to hardware failure. Yerbury said: "Whilst we had a form of disaster recovery before, the Microsoft solution allows us to use an array of Data Transformation Services (DTS) procedures to back up the server hourly and provide a more robust disaster recovery system."

Improved Controls and Audit Trail

By choosing SQL Server as its relational database engine, BP E&P has improved the control and ease of auditing its data. Yerbury commented: "The combination of SQL Server 2000 and Analysis Services has enabled us to do things with our business processes that we couldn't do before, 90 per cent of the data we capture is presented in Excel workbooks- using automated load routines we are able to track the source of the data, who loaded it, and when. The ability to create a comprehensive audit trail provides additional transparency and security around our critical forecasting processes."

For more information

For more information about Microsoft products or services, call the Microsoft UK Contact Centre on 08706 010100.

To access information using the World Wide Web, go to:
www.microsoft.com/uk

Potential to be the Toolkit of Choice Throughout the Company

BP has introduced the GFO solution to its new TNK-BP joint venture in Russia, which is the 10th largest private sector oil company in the world, operating five refineries in Russia and the Ukraine. Yerbury commented: "To us, the Microsoft Business Intelligence platform provides an excellent performance management tool kit. We are keen to extend its use beyond the Exploration and Production segment. We designed our implementation for it to be portable and to suit other business units within BP."

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Software and Services

- Products
  – Microsoft SQL Server 2000
  – Microsoft Analysis Services

Partner and Partner Products

- Altius Consulting
- arcplan dynaSight
- XLCubed

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