



Any downtime on offshore oil and gas production platforms is expensive, which is why planned maintenance is essential. Marathon Oil UK's drive to improve clarity and efficiency in its planning, making the most of time and resources as well as coping with the unexpected, led to an innovative solution based on Microsoft Project Server and SharePoint technologies.

With three platforms in the North Sea Brae field, Marathon Oil has to ensure all its facilities keep running in an efficient and safe manner. Crucial to this is routine maintenance of all equipment and plant and the ability to react swiftly and effectively to any unforeseen breakdown.

For many years, this had been done through Marathon's SAP system, using its plant maintenance module to generate requests for work before re-entering the information into Excel spreadsheets and Primavera. Scheduling these operations in advance relied primarily on the foresight and knowledge of the management and planning teams on each platform.

Not only was this a time consuming process, but it did not take into account what was actually happening or the resources available to carry out the work at any given time. Neither did it flag up any slippage in this business critical activity.

When a company-wide decision was made to switch from Primavera to Microsoft Project, the Marathon planners saw the possibility of taking greater control of the maintenance programme resourcing and scheduling through implementing an integrated enterprise project management (EPM) solution using Microsoft Project Server and SharePoint technologies.

“ Program Framework was recommended to help us with the implementation. We wanted the ability to get efficiency out of the work we were doing. We did not want to come to the same piece of equipment and isolate it many times. We wanted to go to one piece of equipment once and encompass all that was reasonable to do at that time ”

Carol Mackie
Marathon Oil UK

What the company lacked was the experience in using Microsoft Project (MSP) together with Project Server to transfer data from SAP and create the required planning capability.

“ We had a huge wish list because it had to be heavily customised for us. We wanted it configured in a specific way and needed to find out if it could be done. Program Framework came up with some proposals that tweaked our interest even more! ”

Scott Peart
Marathon Oil UK

Client testimonial

Microsoft Project brought in a different set of opportunities that we did not realise it had. The biggest bonus was the ability to give ownership in appropriate places – we could put a stop to the ‘fiction’ that went into the plan.

Program Framework brought expertise and guidance when we needed it and in the places where we needed it. The quality and speed at which things came together helped us enormously in getting through the amount of work we needed to do to configure what was a complex tool to make it useful offshore and onshore.

Carol Mackie
Planning Team Lead
Marathon Oil UK

A formal, comprehensive process to fully understand what was needed included Program Framework's lead consultant, Andrew Dover; spending significant time with the Marathon team to learn how they worked and what their detailed requirements were. This was then translated into a workable solution that allowed the offshore supervisors and teams to easily see what they would be getting.

“The main challenge was to understand their current systems and create something that was stable, would interface with SAP and could be built on for the future, especially as the life of the platforms was being extended.”

Andrew Dover

Program Framework

In the resulting planning solution, asset and activity information including date, time and operational data is passed between SAP and Project Server via an overnight update process. This results in a consistent view of work in both systems and provides maintenance plans that can be visualised, scheduled and resourced using an intuitive and interactive user interface.

These plans are generated on a quarterly basis and, once agreed with those on the platforms, execution is monitored against baseline key performance indicators so that Carol and her team can quickly spot if any platform is off-plan and help get things back on track.

The system carries out routine daily checks that flag up any delays or problems, allowing planners to reschedule work as and when required to maximise efficiency, safety and resources. Information is then updated and synchronised with SAP on a daily basis while the plan is in execution allowing platform managers to make critical, informed decisions based upon up to date information.

This approach also gives a platform view of all activities that may impact on maintenance work, such as notifying planners if a crane is unavailable for a heavy lifting operation because it is undergoing routine maintenance itself.

Creating the solution was only part of the challenge.

“It doesn't matter how good the package may be if you don't bring your users on board. Training was and continues to be an essential aspect.”

Carol Mackie

Marathon Oil UK

Initial introductory training at the Aberdeen base and on the platforms has been followed up with a second training programme for all users to reinforce the earlier lessons, ensuring everybody has fully bought in to the system and uses it in the same way.

The results are already becoming clear:

“All three platforms have reduced their backlog, all maintenance is being planned and scheduled and is much more visible. It has made people more accountable, important data is more available and easier to find and it has certainly increased efficiency.”

Carol Mackie

Marathon Oil UK

Technology

The Marathon solution is a highly configured Microsoft® Project Server 2003 implementation, and uses Microsoft SharePoint technology to support collaboration and document management. It is deployed to offshore users using Citrix thin client technology to ensure best performance. Interfaces are in place with Marathon's SAP Plant Maintenance Module.

Reporting and data analysis facilities were developed using Microsoft Business Intelligence technologies such as Sequel Reporting Services and Analysis Services.

Program Framework provides ongoing technical and user support, ensuring that help is at hand whenever needed.

