

BAE SYSTEMS



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CREATING A VALUE-BASED BUDGETING SYSTEM FOR BAE SYSTEMS. COGNOS PLANNING ENABLES LONG-TERM PLANNING FOR MORE THAN 1000 INDIVIDUAL PROJECTS.

For major defence contractors working to create NATO-compatible systems for land, sea and air warfare, the ability to manage profitability over major development projects that can last for ten years or more creates major challenges for financial planners. Sheer project duration means that raw materials, labour and finance costs may be subject to the inevitable changes caused by inflation and other economic factors, and so it is often difficult to gain a clear picture of either cost or profit in relation to initial budgets.

In a major planning and budgeting project using Cognos Planning, BAE SYSTEMS (Defence Systems) Limited has developed an innovative approach that provides an accurate picture of performance based on the current value of existing and future projects. The resulting system has not only enabled the company to track the costs of individual projects more effectively, it has also supported a culture change programme that is transforming the way the organisation monitors its overall financial performance.

According to the company's financial planning manager, Tim Bamford, the system has substantially enhanced the company's decision making process within a very short time. He said: "Our entire budgeting process is much more interactive than before. We can now model costs and margins far more easily, rippling changes in overheads throughout the model and making effective decisions based on the scenarios we create. Because the system took less than two months to implement, which I don't believe would have been possible with any other application – including a spreadsheet – it took a while for our own ways of thinking to catch up with the changes it brought. It was clear almost immediately that we would be able to do a whole range of things that simply wouldn't have been possible in Excel."

ACHIEVING A PRECISE VIEW OF LONG-TERM FINANCES

BAE SYSTEMS (Defence Systems) Limited was originally formed when GEC and Siemens took over Plessey in the early 1990s. Since then, other parts of BAE SYSTEMS have been incorporated into the business to create a company that has some £400 million turnover generated by 4,000 employees from projects including radars, combat systems command and control information systems and communications. As the thrust of weapon systems development moves increasingly towards the digitization of the battlespace and NATO-wide integration, the company works on more than 1000 individual projects whose total values range from less than £1 million up to £200 million.

Given that the kind of systems the company builds are likely to be unique or at least modified for each customer, there can be no standard price list and every order is costed individually. This also means that each year's budget is zero-based, with detailed budgets being prepared for three to four years ahead with a more strategic view pushing out to ten years.

The duration of some of the larger projects means that cost and pricing structures are subject to considerable change over their lifespans, which creates the need for a radically different approach to management in terms of both cash and Profit & Loss. Tim Bamford explains:

"We wanted to build a large model that would enable us to look at 1000 plus projects and that also took account of the 'time value' of money.

"In simple terms, we wanted to be able to model discounted cash flow. This would enable us to review performance on the basis of different scenarios where £1 million cash received today is worth more in real terms than £1.1m received in two years time.

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THE NEXT LEVEL OF PERFORMANCE™

“While accounting profit would still be a key measure of performance, this Value Based Management (VBM) approach was intended to reflect a general cultural swing towards cash management in our business. It would also require close integration of many parts of our business to enable us to drive resource allocation from a true sense of the value of projects that are being worked on.

“The different parts of the business that had been glued together by mergers and divestments over the years were all using different approaches. One part of the business was using an Excel front end to an Oracle database, whilst other parts were using purely spreadsheet based tools. A common tool to implement the value based approach was therefore a way of integrating all our operations as well as a vehicle for changing the culture of the entire organisation.”

A MULTI-DIMENSIONAL VALUE BASED MANAGEMENT SYSTEM

Having selected Cognos Planning for its flexibility, multi-dimensionality, ability to create a range of models and the speed with which it could be implemented, the company set about building a system which incorporated the requirements of financial staff from all of the different groups within the business. The system features defined by these groups included the following:

- A spreadsheet style interface with access to database-type features
- Speed
- Portability
- Flexibility to handle both large and small change
- The ability to cope with high volumes of data
- The potential to support 100 users
- A multidimensional facility to ‘slice and dice’ data in different ways.

The system architecture was designed to support 80 users over a Windows NT network drawing data from SAP R/3 and Oracle via the Cognos Planning Add-In for Excel. Developer Training started in March 1999 and the system went live by mid-May, as Tim Bamford describes:

“We had a working, usable model in Cognos Planning within two months, and we do not believe we could have achieved this in any other application – even a spreadsheet would have struggled to achieve that. The model is accessed from half a dozen different sites with project accountants responsible for their own projects supported by a matrix of project managers.

“Everything is built from the project up: we are currently looking at cash, profit and value consolidating up from projects to business areas. Because we manage to a very low level, we can see the impact of changes and problems very quickly as they ripple through the system. For example, we monitor engineering activity hours and rates closely, and if the activity budget changes, we can assess its impact on the overall cost of the project instantly.

“We also find that the system’s multi-dimensionality enables us to see trends in different areas and respond to them quickly. Ultimately, we intend to use Cognos Planning to create a rolling quarterly forecast of project and business area performance.”

ABOUT COGNOS

Cognos is the world leader in business intelligence and enterprise planning software. Our solutions for corporate performance management let organisations drive performance with planning, budgeting and consolidation, monitor it with scorecarding, and understand it with business intelligence reporting and analysis. Cognos is the only vendor to support all of these key management activities in a complete, integrated solution. Founded in 1969, Cognos now serves more than 23,000 customers in over 135 countries.

