

SOUND INVESTMENT

Following two costly project overruns, **Russell Taylor** at Roke took the decision to shake up existing PM practices. Top of his list was a framework to improve and measure professionalism.



The project management history of Roke may sound familiar to many involved in project management.

Project managers were often accidental – one day an engineer, the next a project manager; seen by the project team as the brave soul whose primary purpose was to take the beating for the team if the project became late or spent beyond its budget.

None of our project managers held a PM qualification. Our project delivery processes were different for every project and largely based on whatever processes our customers used. Project management competence was not a significant factor. In the past this worked for Roke because the typical project was small, the contract basis was time and materials, and the focus was entirely on delivering technology that others could not.

But things changed. Our customers started to ask for turnkey, whole product solutions ready for volume manufacture, rather than just bits of cutting edge technology. Our work changed to 90 per cent fixed price, financially dominated by larger, riskier projects. We made a strategic decision to add our own high-technology products to our portfolio.

This brought about added pressures as projects increased in value, complexity and risk. The situation came to a head in

2006/7 when two multi-million pound projects went badly wrong – resulting in losses of the order of their contract values.

It was clear our project management had to improve – but first we needed a business case.

COST-EFFECTIVE

Every year we invested thousands of pounds on project processes, training and qualifications. Yet we had no way of quantifying or measuring the return on that investment.

So we set about designing and implementing an overarching framework to improve project professionalism throughout the business. This was not simply a case of implementing better PM just because it ‘felt’ like the right thing to do; it was based on cold, hard facts telling us that it was the right thing to do.

The first thing we did was to target PM training. In the past we couldn’t reliably identify our professional project managers; they were embedded in the engineering groups and roles varied from group to group.

By changing our organisational structure, adding a Project and Process Department with a staff of project managers and quality assurance professionals, we were able to offer a consistent PM career path. This catered

THREE STEPS TO KEEP PROJECTS ON TRACK

1 **RED-AMBER-GREEN FLAGGING**
Projects are reviewed at least monthly, Green by a peer PM, Red and Amber by a director or in many cases the whole board of directors. This encourages project teams to be open about risks and issues as they develop.

2 **TRANSPARENT PERFORMANCE METRICS**
A monthly Projects Report is made available to all employees, including project performance metrics, so we can assess progress and direct improvement work.

3 **LEARNING LESSONS**
A quarterly PM forum enables project managers to meet regularly, share good practice and work as a team to embed lessons learned from projects.



Russell Taylor is projects director at Roke.

ABOUT ROKE...

Roke Manor Research is a products, consultancy and R&D lab for the civil, defence and national security markets. It has 450 staff that includes 350 engineers and scientists working on 'first, fast and difficult' projects.

for all levels of project management and followed the IPMA grading scheme (level C Project Manager, level B Senior PM and level A Project Director).

Next, we looked at the way projects were graded. Roke typically has 375 projects but only a small number, 41, account for 70 per cent of the total project value.

Therefore it was critical that we had some means of matching PM competence levels to the project value, risk and complexity. Project categorisation allowed us to do this quickly and effectively, and meant that professional PMs from the Projects Department were assigned higher value projects (category A to D) but engineers could manage lower category E and F projects.

This maximised the return on PM investment and limited our business risk.

STANDARD APPROACH

The application part was covered in the Roke Engineering Process (REP). REP provided a standardised but tailorable approach to all projects, irrespective of size or cost. It also allowed project managers to get involved early on in the bidding stage.

We now invest around £300,000 annually in REP and have seen big changes in the way projects are delivered as a result.

To make sure we keep developing PM talent we also put in place a PMR – Project Manager Review. The PMR tool comprehensively documents and analyses an individual project management career: qualifications, training, bid and project experience, and an annual self and line manager assessment of PM competence, all measured against an

embodied PM competence framework.

All department project managers update their own PMR. This feeds into their bi-annual performance review, helping us assess results against objectives and guide further training and career development.

PMR includes a number of standard metrics to enable a PM to see how their performance compares with their peers. 'Bid accuracy' for example measures how accurately a PM put together the project cost at bid time when compared with the project cost at completion.

PMR clearly shows an individual's standing against the requirements for each project management grade, what needs to be achieved in order to progress as well as how to get started on a PM career.

We now spend around £12,000 per project manager, per year in training and CPD.

REAL BENEFITS

Since overhauling PM practices at Roke some three years ago, project results have greatly improved.

Better than budget project results are now two to three times the cost of the investments in process and PM competence improvement. And even those projects that get into difficulty now only result in some level of profit reduction – so not perfect, but a vast improvement.

The benefits are not just financial. Our customers see the improved PM performance and this translates into repeat business. Internally, whether we need professional project management is no longer questioned. The PM role is now in demand and aspired to.

INSIDE VIEW:

DAVID MCDONALD, BUSINESS DIRECTOR AT ROKE:



“REP has improved project delivery and ensures that project managers are now involved at a very early stage; our project managers have an effective delivery plan and assess the project cost, profit and risk at the bidding stage – a big change.”

JANICE TURNER, PROJECT MANAGER AT ROKE:



“The PMR provides a single place to store your PM career history. It maps out the PM career path and gives me a clear view of what I need to achieve in the future to continue my career as a PM professional.”