Re-shaping Project Management Education

The need for project managers to have a broader understanding of the dynamics of business.

This article is the first one of a series that have emerged from conversations between Terry Cooke-Davies and Eric Wolstenholme. The conversations have ranged widely, covering many aspects of how to improve project performance, and drawing on the experience of both Terry and Eric in the context of a PhD thesis that Terry is submitting under Eric's supervision. Terry has been a project management consultant to blue-chip organisations for more than thirteen years, and is increasingly providing services in support of "soft" projects. He has also run businesses large and small with full profit responsibility continuously since 1968. Eric is Professor of 21st Century Business Learning at Leeds Metropolitan University and is a leading consultant to major corporations on system dynamics.

The business context of project management has been changing fast during the past decade. Imagine the scene. Three people wearing worried expressions are engaged in an intense discussion in the corner office of an electronic components plant somewhere in England. Anne, the chief executive, has called the meeting to discuss why a key milestone is slipping in the company's major business process reengineering project. She has called in Dave, the local project director, and Andrew, the HR manager.

"We're not here to point fingers and blame people." Anne opened the discussion. She was one of a new breed of Chief Executive Officers in the company. Well schooled in finance, and with a first rate MBA, but with her line management experience mainly in marketing. "I just want to find out what we need to do next. Morale and productivity are both falling like a stone, and, as I see it, there isn't a hope in hell of making the announcement about our planned new organisation structure by the end of the month. We've given a commitment to employee representatives that we'll tell them by then, and if we know we're going to miss the deadline, we need to signal that just as soon as possible. What's the present situation, Dave? Is there any hope of making the milestone when it's due?"

Dave looked uncomfortable. "You're quite right, Anne.", he acknowledged, "We won't be anywhere near ready to announce the new structure when its due. As you know, Sabine's got pan-European teams working on the detailed process design, and they're having serious difficulties getting the systems bedded down well enough to finalise the design. Until they do, we won't know just what is to be handled in the new plant, what will migrate to Europe and what will stay here. From where I stand, the design project is in a complete mess, and getting worse. I think we're at least eight weeks behind schedule. I'm very frustrated, because we've got a whole raft of activities waiting to be triggered by the announcement, and we can't get on with any of them. Rumours are flying around, and, as you say, morale is really low." As a production engineer by training and by experience, Dave was well used to managing projects, and recognised the importance of keeping commitments and hitting deadlines.

"That tallies with what I've been hearing from elsewhere, Dave. But Sabine tells me that her problem with the design project is not only about the systems, she is also having trouble getting people with first-hand operational knowledge released from the national companies to work in the design teams. Do you have any views on that, Andrew?"

"Sabine was talking to me about it last week," said Andrew. He wasn't quite sure how to say what was on his mind, without his own commitment to the project being called into question. He knew Anne was getting a lot of heat from her boss both about current results, and about the delays to the programme, but he was very unhappy about what he saw going on. His concern was that the project was being run too much as an engineering project, without adequate recognition of the impact of the changes on individuals whose lives were to be disrupted by the results of the project. "After she told me about her problems, I went and spoke to the department heads, to try and find out what was going on from their point of view. I think there's more too it than simply a lack of co-operation. I'm not sure that the department heads really think the new process will deliver the goods, and in any case, they're fully stretched trying to meet present production targets. I'm afraid that they see the whole project as another misguided initiative by a remote management who don't really understand the business."

Anne shook her head, got up and went to look out of the window at the busy plant below. The problems that she was thinking about are, in truth, not unlike those encountered day after day by companies that are being forced to respond to the pressures of competition by transforming the way they do business.

And transforming business performance is an area in which the project management profession is now seeking to influence the debate.

The 10th Internet World Congress on Project Management in Vienna in 1990 was entitled "Management by Projects" and held out the vision of a truly project-based organisation. A number of recent text books including Rodney Turner's "Handbook of Project-Based Management" (1993) and Albert Hamilton's "Management by Projects" (1997) have held out the vision of project management as the process for achieving strategic objectives in a changing world. And the International Journal of Project Management devoted a whole issue (Volume 14 number 6, December 1996) to the subject of Business Process Reengineering because "for business process reengineering to deliver results it has to be project-enabled". The project management profession seems to have ambitions to move into the centre ground of the management of business change.

From the perspective of the project manager, this ambition makes perfect sense. Project managers are trained to recognise the similarities of process necessary to manage very dissimilar projects. "Bodies of knowledge" define the full extent of disciplines, practices and processes that are relevant to a project manager, regardless of what industry or type of project s/he is engaged in. Increasingly, professional qualifications offered by the professional organisations are offering a structured approach to vocational qualifications. It seems only natural that the profession should turn its attention to all those areas where the more effective application of project management practices could offer benefits.

Seen from outside the profession, however, this ambition seems to lack credibility. The view of project management is often fragmented and incoherent. There are some who still see project management as something that goes on in construction or engineering. It is the province of engineers, of complex network diagrams, of contract administration, and of legal wrangles about changes and who will pay for them. Others see project management as a set of disciplines that can be applied to I.T. and to business systems projects. Disciplines that very often fail to deliver!! Indeed, this can feed a perception that "all projects run late and exceed budget" — a view that is encouraged by well-publicised difficulties with projects such as the Channel Tunnel or the new British Library. Still others in general management share a belief that every manager manages projects, and that a three day course on how to draw bar charts using Microsoft Project is all that an intelligent manager needs in order to pick up the basic specialist knowledge.

So how can we reconcile the view and ambitions from within our profession with the range of images fixed in the minds of our colleagues in management? How are we to set about accomplishing our ambitions to shape the management of business transformation projects and programmes?

The imaginary scene involving Anne, Dave and Andrew hints at the existence of a gulf of misunderstandings between three different perspectives on a business transformation project: that of the general manager; of the "people" manager; and of the project manager. Just how wide the gulf is, can be illustrated briefly by contrasting a couple of the "mental models" current within the project management world, with those that are rapidly gaining acceptance among both general management and the HR professionals.

Firstly, the role of a project manager. Single point authority is virtually a "credo" in the project management profession. "I was pleased to see that the single point contact — the emphasis on the project manager — is maintained," writes Eric Gabriel in his foreword to Rodney Turner's work already mentioned. And this is pretty representative of the views of the profession.

In perhaps the single most influential book on business process reengineering, however ("Reengineering the Corporation" by Michael Hammer and James Champy) there is no mention of the project manager. Instead, the crucial roles for a business process reengineering effort are defined as:-

1. Leader - a senior executive who authorises and motivates the overall re-engineering effort.

2. Process owner - a manager with responsibility for a specific process and the re-engineering effort focused on it.

3. Reengineering team - a group of individuals dedicated to the reengineering of particular process, who diagnose the existing process and oversee its redesign and implementation.

4. Steering committee - a policy-making body of senior management who develop the organisation's overall reengineering strategy and monitor its progress.

5. Reengineering czar - an individual responsible for developing reengineering techniques and tools within the company and for achieving synergy across the company's separate reengineering projects.

But the gulf is much wider than simply the role of the project manager. Neither "project manager" nor "project management" is listed in the index of Hammer and Champy's book.   More significantly, perhaps, the authors produce a concluding catalogue of the nineteen most common errors that lead companies to fail at business process reengineering. Among these are several that don't at first sight seem simple to reconcile with the disciplines of project management as most widely taught and implemented by the profession.

- Don't place prior constraints on the definition of the problem and the scope of the re-engineering effort.

  This will surely place strains on a project manager's scope management efforts?

- Don't assign someone who doesn't understand reengineering to lead the effort.

- Don't fail to distinguish re-engineering from other business improvement programmes

  Do these two taken together suggest that there should be a new breed of project managers - the business process reengineering project managers?

- Don't neglect people's values and beliefs.

  This is certainly something that is acknowledged as important by the project management profession, but as Peter Storm so ably demonstrated at IPMA, Paris in 1996 "soft projects [which require changes in people's behaviour] . . . . require adaptations from the conventional project management approach." That is also the problem identified by Andrew in our imaginary scene at the start of the article.

Although these examples are taken from a single book, a careful reading of the books and articles that are shaping the way the leaders of business think today leads to the same conclusions. Both browsing through the literature, and eavesdropping on senior management conversations such as that which opened this article gives the impression of a change in the fundamental nature of roles, relationships, motivation and control within business. There is a new business agenda, fed by a new way of competing. Against this background, the project management profession, for all its ambitions, can appear to be either anachronistic, or else wedded to the requirements of the specific industries which provided its roots — engineering and construction. There is a need for "New World" project management!

The lessons from business transformation projects are not incompatible with those from project management. But the mental models that underlie a successful business transformation effort include a number of aspects that are *very* different from those that underlie the traditional project management bodies of knowledge.

The point appears to be recognised by K. T. Yeo who acknowledges in his editorial to the IJPM mentioned above that "Project management was built on systems engineering which is control-oriented. When changes are too rapid and control too excessive, they can cause pain." And attempts to manage business transformation with models that are too control-centred can indeed lead to much pain, and often to a failure to deliver the full benefits of the transformation. Until the profession can "leap over its shadow", it cannot expect to be taken seriously as a voice in the discussions on business transformation.

Our heritage in engineering colours our whole approach to the practice of professional project managers, and it all has its roots in our education. It shows itself in the articles published in our professional journals. Most project management education in our Universities is parented in the engineering departments. In business schools, the parent is usually operations management. The impression given is that the core remains that of engineering control, while a recognition of the importance of human factors, and the need for understanding the business case for a project are "bolted on" around the outside. This must change "root and branch" if "New World" project management is to become a reality and not remain an ambition.

The time could be right for a change. Several business schools are now offering project management courses that include a broader range of topics than the traditional engineering-based courses. But is this enough? Surely what is called for is more fundamental than that. What we need is a re-shaping of the education of project managers, to encompass a rich and wide-ranging understanding of the dynamics that underlie the modern business.

Terry Cooke-Davies

Terry Cooke-Davies is Managing Director of Human Systems Limited, a specialist project management consultancy firm that since 1994 has formed and supported learning networks of blue-chip companies to

benchmark both their corporate project management practices and the performance of their projects. Eric Wolstenholme is a Director of Cognitus Systems Limited, a company that provides consultancy and training in system dynamics, and is the UK distributor of iThink software for creating system dynamics models/