

Drawing Lessons from the Evidence

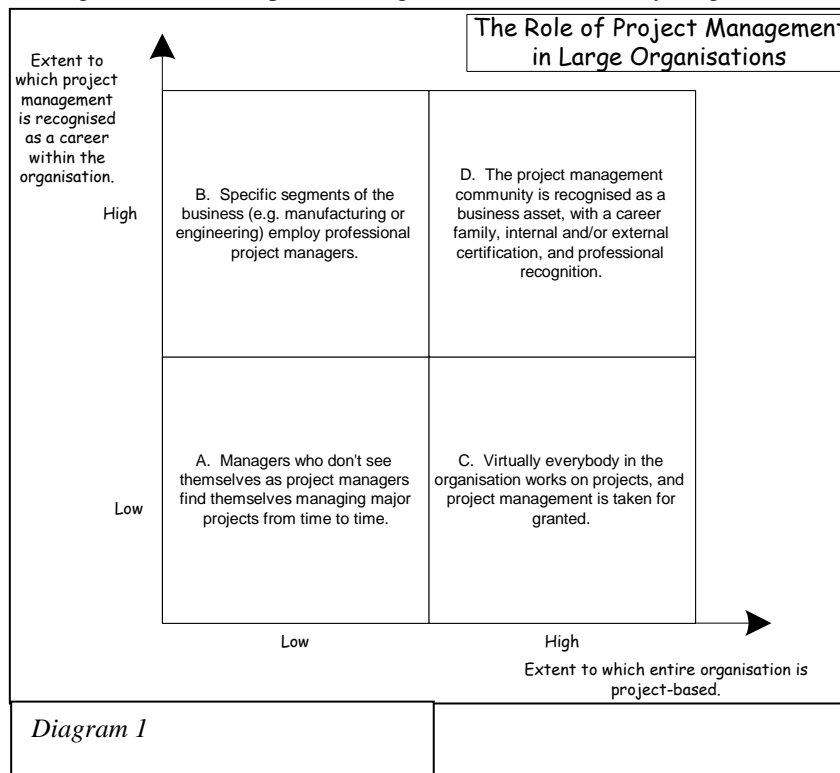
How and why large organisations should base their decisions about project management on evidence as well as intuition.

Projects are important to *all* large organisations. It doesn't matter what kind of organisation operating in what kind of industry – projects are important.

This is well recognised in the classic 'heartland' of project management. Major manufacturing companies competing in global markets, for example, recognise that the provision of capital plant for a competitive price can make a big difference to the return on capital employed, and thus on shareholder value. The effects of modern project management practices on the cost of exploration and production in the North Sea would be a good example of this. In the same way, the provision of capital plant at the right time can enable manufacturing companies to win market share through the timely introduction of new products. Chip makers such as Intel come to mind.

The recent articles in Project Manager Today on 'Pipeline Management' illustrated dramatically the impact that project management can have on R&D effort, in terms of improving an organisation's 'time to market' and returns on new product development spend. And this applies to any company's R&D spend, whatever the industry sector or market that the company operates in!

Tom Peters, co-author of 'In Search of Excellence' and a leading management guru, recognises the importance of project management to all businesses operating in the 1990s. And he is not alone. It is probably the recognition of this all-pervasive significance more than anything else that is leading the



world's professional project management associations to re-define project management as the means by which any organisation achieves strategic change.

During the past fourteen years I have spoken about projects to many CEOs and senior managers in large organisations. Most of them recognise the importance of projects to their organisation. It is on the question of what they are prepared to *do* about that recognition that they differ. They differ about whether or not to view their organisation as a project-based organisation; and they differ about how to manage the careers and professional development of project managers within the organisation. Clearly these two dimensions are related, but not as tightly as might be supposed. Diagram 1 shows the variety of combinations that is possible, and there are many gradations possible between the four types of solution that are described.

Which is the right approach for an organisation to adopt? Is there any evidence that project performance is dramatically better in (say) a Quadrant D organisation than in (say) Quadrant A?

There is, of course, much more to delivering effective project performance than the way the organisation thinks about projects and about the careers of project managers. There are, for example, questions of methodology and process. Most large organisations have their own approach to carrying out projects, and this may or may not be documented in procedures manuals, and it may or may not be supported by a programme- or project-office. But which processes make the critical difference? How can an organisation be sure that its own project management community is adding more value for customers and shareholders than the community of its main competitors?

Opinions seem to differ, and differ widely, depending upon whom you speak to. One director of projects will tell you that the secret lies in applying a standard methodology with rigour, while another will tell you that it matters less about the methodology than about the competence of the project managers. One will tell you that an effective risk management process is the key to project success, while another will tell you that resource management holds the key.

So who is right? Can it be that they all are? Does it really depend on the circumstances of each project, each company, each industry? Are there no dependable guides? If not, what does that say about our profession, and the influence of our professional bodies? Without clear evidence of what works and of what doesn't, the profession as a whole will be dependent on the schooled and developed intuition of experienced practitioners. It will be, in other words, in the same position as the practice of medicine was before the advent of modern medical science!!

And there is plenty of evidence that we still have a great deal to learn. Report after report identifies that projects fail to deliver the benefits that form the apparent reason for them being undertaken. KPMG's recent report into IT projects that implement package software solutions, showed that although 89% of the projects were rated "successful" or "very successful", only 25% had measured and obtained the benefits promised by the business case. Other responses ranged from "partially obtained", through "too early to say" to "don't know".

This phenomenon isn't confined to IT projects. Research by O'Connor and Reinsborough (written up in *The International Journal of Project Management* in May 1992) suggests that far from improving over time, the actual proportion of projects with a performance regarded by project review teams as poor or worse is increasing.

The 1993 National Audit Office report into 25 major defence projects identified an average overspend of nearly 6%, and an average schedule delay of 25%. And the defence industries (along with engineering and construction) have been leading the way in the development of project management techniques ever since the introduction of critical path analysis during the 1950's on the Polaris programme.

It was the recognition of the painfully high incidence of poor project performance, coupled with an absence of quantifiable and comparative data that led us during 1993 to begin assembling and supporting networks of major organisations to benchmark project management disciplines and practices. We wanted to include a wide variety of industries, because we believed that different market circumstances would lead project managers in different industries to focus on different aspects of project management. And that has subsequently proved to be the case. But doing something about it is far from easy.

Any attempt to provide objective evidence about project success must first surmount the daunting hurdle of how success is measured. This topic is far from trivial. In a classic article in 1988 Anton De Wit distinguishes between project success (measured against the overall objectives of the project) and project management success (measured against the widespread and traditional measures of performance against cost, time and quality). He points out that the different objectives that projects are designed to achieve can be arranged in a hierarchy, with not all equally important, and that the different stakeholders in the project such as owner, user, sub-contractor, supplier, or designer may all have success criteria that differ from each other. He concludes that "to think that one can objectively measure the success of a project is an illusion".

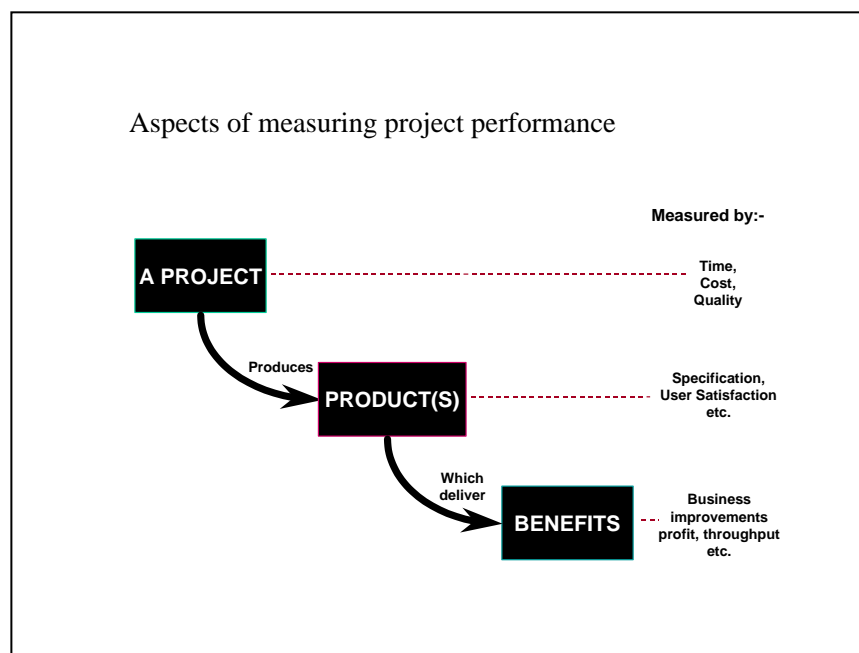


Diagram 2

This appears to me to be unduly pessimistic, but I'm sure that Anton is right about the complexity of the topic. It is perhaps more useful to think in terms of three kinds of measures rather than two, as shown in Diagram 2. The first measure (time, cost and quality) is useful for an enterprise in terms of answering the question, "Did things turn out as we planned that they would?", but there are additional questions such as "How well did we manage this project?" that also apply to the project. The product can be measured using a whole set of comparisons about cost, quality, performance, reliability, upgradeability and so on. And at the final level, benefits can be measured in both financial terms, and in terms of other parameters that the organisation uses to define its operating objectives. Clarity about these measures is essential if an organisation is to gather evidence to assist decision-making about projects.

Evaluating project success or failure is only one of the hurdles to be overcome in gathering objective evidence. A second is the reality of pressures experienced by the project team. Post project reviews are rarely given the priority that is due to them. And even when they do take place, there is rarely any objective way of recovering precisely what occurred when in the life of the project, and what influence it had on the project success or failure.

In developing project performance benchmarks, as well as corporate process and practice benchmarks, our networks have found it necessary to develop a new form of software that enables project managers to capture simply and quickly in real time information about their project management practices as well as the current perceptions of project performance. This enables the project manager to obtain instant feedback as to the effectiveness of his or her project management practices, as well as gathering invaluable data for subsequent analysis by the organisation, and for use in both internal or external benchmarking.

Analysis of data collected in this way from the networks shows, for example, beyond reasonable doubt the difference to predictability in terms of cost, time and quality that can be made by certain risk management practices, and by specific control policies. It also begins to identify how projects can be categorised in a meaningful way to provide internal and external comparisons.

So what steps can large organisations take to gather evidence, and to improve their project management practices in the light of what the evidence suggests?

The answer, it seems to me, varies depending upon which quadrant in Diagram 1 the organisation finds itself, and on whether or not the organisation has a central programme- or project-office. The presence of a programme office can either help or hinder the process. A programme office that is truly respected, and that facilitates the spread of best practice using instruments such as a well-maintained Intranet site can be a great help. On the other hand one that either enjoys little respect, or that is not

well connected with the project communities, can be seen as at best an irrelevance, and at worst a positive hindrance.

The first challenge facing Quadrant A and Quadrant C organisations is to assemble a community of project managers of sufficient mass to begin to create an organisational focus on the disciplines and practices of project management. A second and related challenge is to find a group of ‘champions’ from within this community who can gain the respect of the community, and who can then embark on the third challenge – gathering sufficient evidence in a suitable format for internal and external comparison. This will almost certainly involve some form of structured benchmarking, and could well contain membership of both a single-industry network (such as the European Construction Industry Institute) or an inter-industry network (such as our own Europe 1 and Europe 2). The fourth and final challenge, then, is for the organisation to respond to those comparisons by improving the practices and processes until they are truly ‘world-class’.

Quadrant B organisations have a different initial challenge – to decide whether they can and should speak for the whole organisation, or simply for that part (such as the engineering department) that acts as ‘parent’ to the professional project managers. In very large organisations, this can be a substantial challenge. I have come across organisations that contain, for example, civil engineering project managers in the facilities divisions, IT project managers in the systems departments, and many business units acting as Quadrant A organisations – with none of these communities talking to the other!!

By definition, Quadrant D organisations do not have the initial challenges facing the other three types, and many are already active in one or more forms of benchmarking. The challenge facing them is to question themselves about the extent to which they are ruthlessly seeking to gather evidence of project performance compared to other ‘world-class’ organisations, and the extent to which the project management community is seeking to add ever more value for customers and shareholders.

As I wrote at the beginning of this article, projects are important to *all* large organisations. Ask yourself what impact it would have on your organisation’s performance if your project management community could deliver a 10% reduction in the costs and delivery times of all projects? And what if each project delivered 100% of the benefits promised in the business case? That is the minimum we should be aiming for.

Terry Cooke-Davies

This is the text of an article that appeared in the April 1998 edition of Project Manager Today.