



Thriving during tough times

improving project results in the face of adversity

This is the first of a series in which Terry Cooke-Davies will be getting to grips with topical issues and problems in project management. He is well known in the industry as a consultant to blue-chip organizations for over 16 years and the founder of a family of pm knowledge networks supported by Human Systems International. This has brought him into contact with the best practice in some 70 leading global organizations. He begins with ways of improving project results in the face of a global downturn.

These are tough times for companies in many industries and many countries, and project management departments are not immune from the effects.

It is true that the amount of project working is increasing all the time¹ and membership of pm professional bodies is growing apace. Yet, as economic difficulties follow in the wake of the dot-com boom and collapse, spreading out to telecoms (already grappling with their own G3 problems), electronics and IT (as infrastructure investment slows) and ultimately to a much wider range of industries and markets, the search for instant cost reductions is reaching into all central overhead departments. This time, as well as the inevitable corporate offices, travel and training, even pm departments and project support offices are being hit.

So, is project management a part of the problem, or a key to the solution? You won't be surprised to learn that I hold strongly to the latter view. We see so many poorly managed projects even in the best-run companies that our old estimate of under-performing by more than 20% now looks to be highly

optimistic.² Imagine what your company's revenue, profits and balance sheet performance would look like if every project were 20% quicker to completion, or delivered 20% more benefits, or cost 20% less. How can we not be striving to accomplish this?

This sounds fine in principle, but what can we do about it in practice? If we have been unable to make dramatic improvements to project performance even during the prolonged bull market of the 1990s, what can we do in the present hard times?

Aiming for world class performance

In the face of financial stringency, what should we do to improve the financial benefits delivered by project management? When money is scarce, what practical steps can we take to improve our pm practices? How can we build and maintain momentum to continuously improve our pm processes, whatever the external circumstances?

In this article, I am going to describe the five characteristics of a continuous improvement programme for project management that makes sense in even the most stringent of times. These are characteristics of programmes that we have seen implemented in companies that deliver world-class projects. Although no single company possesses all of them, each of them is an observed practice rather than a theoretical possibility. The five characteristics are that:

- 1) a solid business case for improving pm practice and project performance guides every step of the programme;
- 2) clarity about the organization's current performance leads to realistic goals for improvement that are tied to specific improvement actions;
- 3) an integrated range of metrics allows progress against the target to be measured in a way that is accurate, timely and relevant;
- 4) use is made of both internal and external know-how, to deliver improvement projects in a cost-effective manner, with the full support of the pm community;
- 5) all improvements are designed to be implemented in such a way that they lead to sustainable excellence.

Build a solid business case

Project management itself does not contribute directly either to a company's market valuation (except possibly in those rare cases where the market acknowledges project management excellence as contributing a company's capability), or to its quarterly financial performance. It operates only indirectly to improve project execution, and since each project is to some extent unique, the value added by pm is difficult to quantify with any accuracy.

This is the first problem facing any organization seeking to spend additional money on pm when overhead costs are under extreme pressure. The purpose of a business case is to provide 'information necessary to enable approval, authorisation, and policy making bodies to assess a project proposal and reach a reasoned decision'³. But when heads are rolling in the boardroom and the revenue side of the equation for the next quarterly statement is looking particularly hard to influence, how can we make a credible case for increasing pm?

What this means is, that if the 'authorisation bodies' are to 'reach a reasoned decision' to undertake a programme to improve project management, these same bodies will need to see 'line of sight' connection between improvements in pm and improved financial performance. This requires us to demonstrate two sets of linkage that we haven't previously been in the habit of doing: firstly the link between individual improvement activities and tangible financial benefits to the organization, and secondly the link between pm success, project success and corporate success.

Link activities to financial benefits

A well developed project management plan provides the links between the high-level objectives of the project, the scope of the work to be undertaken, and the means and timing of the delivery of benefits. For a project management

improvement programme, this is more difficult than for many other projects. The benefits themselves are much more indirect, and will be experienced only in the form of better results from projects that are executed throughout the organization. And there will be many and varied projects, as is demonstrated in Figure 1.

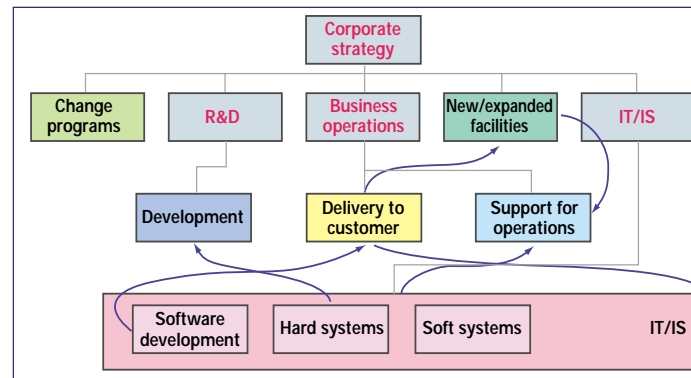


Figure 1: Different types of projects

Each of these types of project provides different kinds of benefits. For example:

General corporate strategy

- Successful business process re-engineering projects (which have a notoriously low rate of achievement of their objectives) can lead directly to improved competitiveness.
- Successful corporate restructuring or merger/acquisition projects can lead directly to enhanced shareholder value.

Business operations

- If the business is essentially project-based (as is the case in many of the traditional pm environments such as engineering, defence, petrochemical exploration, construction or IT/IS systems integration) then successful project performance translates directly into an improved bottom-line.
- If the business is operations-based, then successful projects to support or to improve operations (such as marketing projects, plant shutdowns, or production engineering projects) lead indirectly to improved bottom-line performance.

Research and development

- Successful research projects and (in the case of some industries such as pharmaceuticals) development projects lead to a maximised return on R&D

spend, leading directly to the creation of new streams of operating revenue.

- Successful development projects improve time-to-market, and can enhance competitive position, product sales or product margins.

IT/IS development

- Successful IT/IS projects deliver improved financial benefits (either directly or indirectly), and/or reduced wastage from aborted projects.⁴

Facilities provision and management

- Successful projects to design, procure and construct new capital assets can enhance time-to-market, return on investment, reduced operating costs or some combination of all three.

This list isn't exhaustive, but what all these and other types of project have in common, when successful, is that each of them contributes to the creation of additional corporate value – and sustained, long-term, value creation is both the ultimate measure of corporate success, and the primary purpose of continuously improving pm practices.

Thus, establishing the first linkage to the business case in the pm plan involves mapping precisely where the benefits from improved pm practice will translate into financial benefits. This link is illustrated in Figure 2.

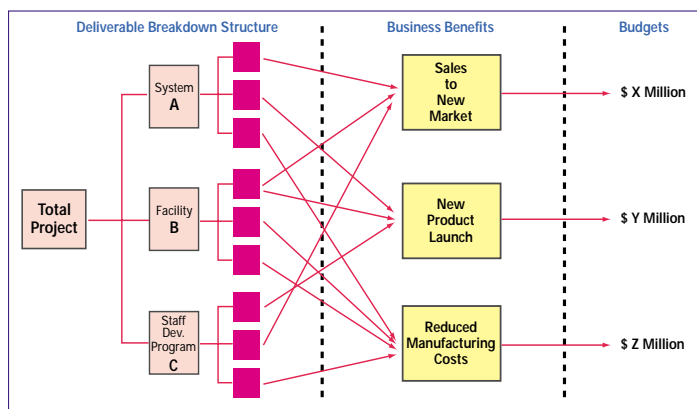


Figure 2: Linking the project plan to financial benefits

Link project management success to project success to corporate success

In a sense, the linking of the improvement activities to financial benefits (as shown in Figure 2)

demonstrates how project success will lead directly to corporate success, at least for the improvement programme. But behind this, there is the need to identify precisely which pm practices need to be improved, in order to deliver the project success that is implied in the benefits delivery plan.

Not all pm practices contribute equally to project success, as I have shown elsewhere.⁵ Some practices, however, have a demonstrable impact on project performance: most notably practices associated with the identification and mitigation of risk impact time performance, and those associated with the management of scope and earned value impact cost performance.

What this means is that improvement actions should be specifically targeted at those pm practices that will provide the greatest direct improvement in project success, rather than simply seeking to implement, say, a standard methodology throughout the organization, which seems to be the starting point for so many corporations.

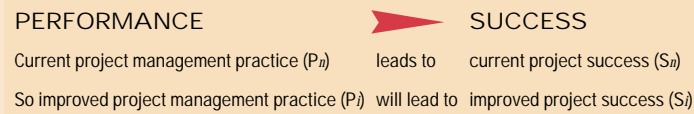
Before leaving the topic of business cases, I would like to correct a deliberate imbalance. I make no apologies for concentrating on quantitative financial benefits in this discussion, given the current economic climate. It would be

remiss of me, however, to neglect to mention that many of the long-term benefits of improved pm practices are intangible and more difficult to measure. Benefits such as faster feedback about whether corporate strategy is misguided, rather than simply poorly implemented, or such as the capability of responding more rapidly to changing market circumstances, are not to be overlooked. They are, indeed, essential characteristics of the mature project-based organization, and it is to the topic of pm maturity that we will now turn.

Obtain clarity about performance

Project management involves more than the skilful and competent management of individual projects. It also requires a set of systems, processes, structures and capabilities that enable an organization to undertake the right projects, and to support them organizationally.

Thus, the first step in any coherent programme to improve pm practices is to establish a baseline of precisely what exists at present. Improving performance implies that there is something to improve! Ideally, building a robust



business case such as we have described above would start from a simple pair of equations:

Unfortunately there are not, as yet, any effective standards for either side of these equations. Even to establish a measure for the 'right-hand side' (project success) involves an organization in committing to apply standards to project performance in terms of both pm success (time, cost and quality) and project success (benefits delivered, strategic objectives achieved). This, then, represents an early stage in preparing the business case.

As far as the 'left-hand side' of the equation is concerned, no standards have yet emerged to guide organizations in their development of requisite organizational capabilities – managing the totality of projects in an organization is very different from managing individual projects.

Particularly in software and systems engineering organizations, the concept of organizational 'maturity' has been popularised through the very successful 'Capability Maturity Model' for software that was developed by the Software Engineering Institute of Carnegie-Mellon University between 1986 and 1993. Since software is developed through projects, it is natural that the concept of organizational maturity would migrate from software development processes to project management, and this has been reflected in an interest in applying the concept of 'maturity' to software project management.⁶

Standards are being developed, and I have been heavily involved in developing an organizational pm maturity model (OPM3) for the Project Management Institute (PMI), which will be the subject of several papers at PMI's forthcoming Symposium in Nashville.⁷

In the meantime, what is an organization to do? How can clarity be obtained about the starting point of any improvement effort? From experience, I know that it can be done. Within the Human Systems' Knowledge Networks, for example, there is a wealth of benchmark data both about a wide range of pm practices using a model that has been developed and refined over the years by the members themselves. The current model being used by the networks is illustrated in Figure 3.

While it is important to have a realistic assessment of starting capabilities, it does not necessarily make sense to initiate an improvement programme across the whole organization. Indeed, one of the most recent pm maturity models produced by Dr. Harold Kerzner⁸ suggests that 'benchmarking' itself is the defining characteristic of the fourth level of maturity, and 'continuous improvement' characterises the fifth and highest level.

Be that as it may, an improvement initiative such as the one that I am advocating may more sensibly be built around actions on specific projects, than across the whole organization. For this a different set of mechanisms is required, and our networks have developed tools such as the Project Health Check tool (which enables analysis to be carried out such as that in Figure 4), and a range of 'self-assessment tools' – which leads neatly on to the third characteristic of an appropriate improvement programme.

Develop an integrated range of metrics

I suggested earlier that it would be ideal to be able to relate specific practices on specific projects to the success

achieved on those projects. Figure 4 provides an example of the impact of a single pm process (key risk selection), on the performance of a range of projects. This was derived from a general tool developed by members of the Human Systems networks, and applied to the analysis of 136 projects from different companies. Similar analyses are possible in any company that is willing to collect the data on both practices and

performance.

Figure 4: Impact on time performance of selecting only key risks to be managed⁹

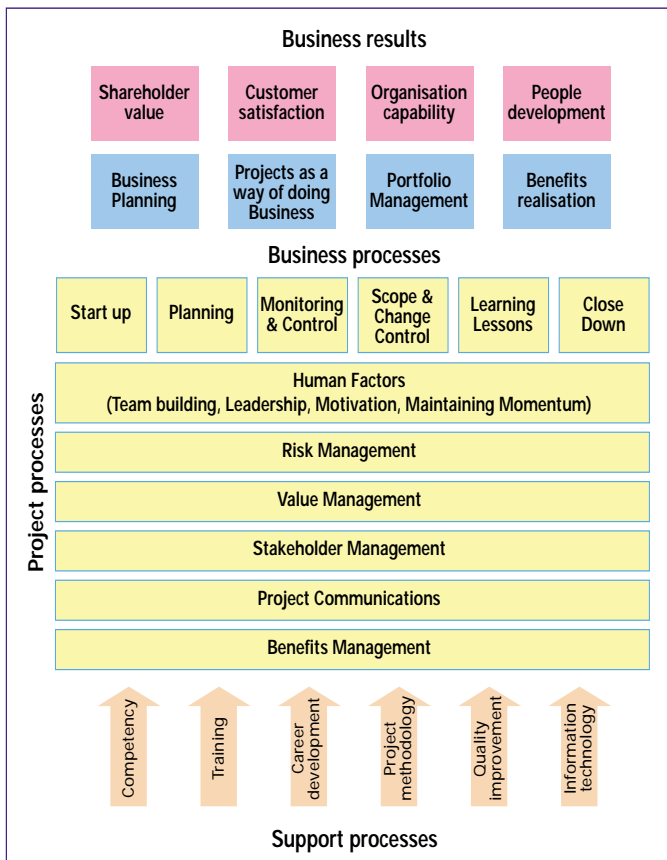
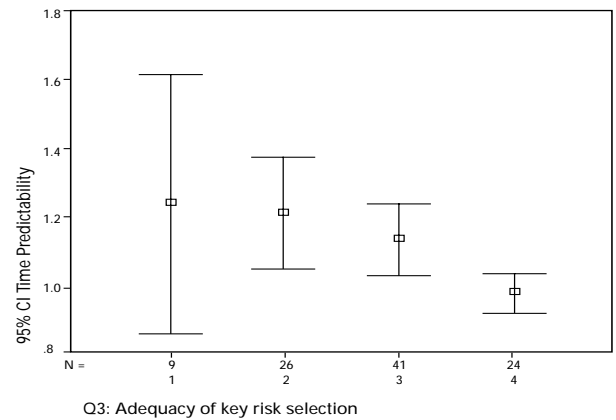


Figure 3: Basis of measuring pm practices ©Human Systems International Limited, 2001

This model has been designed to allow the whole organization to assess the status of pm practices. Members can both establish where they are relative to more than 60 major national and international companies in USA, Europe and Australia, and also establish measurable improvement goals.

In developing the improvement programme that I am suggesting, rather than using a generic tool, it may be more appropriate to develop a suite of success measures that is specific to your own organization's strategic goals. Some members of our networks have, for example, developed very effective suites of 'success measures' using the 'balanced scorecard'.¹⁰

A word of caution is appropriate, however, whether or not you are using or planning to use the balanced scorecard. A recent book by Jeffrey Pfeffer and Robert Sutton¹¹ points out how many organizations fall into the trap of believing that measuring more things leads to better performance on the principle that 'what gets measured, gets done'. What is called for is fewer, focused measurements. And a good way to agree on what these should be is to consult the people on whose know-how the organization's success depends – the pm community.

Leverage – internal and external know-how

Knowledge management in the realm of projects is a very large topic in its own right, and we may well return to it in more detail in the future. Results of knowledge management initiatives have often been disappointing, and for every success attributed to organizations such as BP Amoco or the US military¹², many more companies have expensive intranet sites that have never delivered what was promised of them.

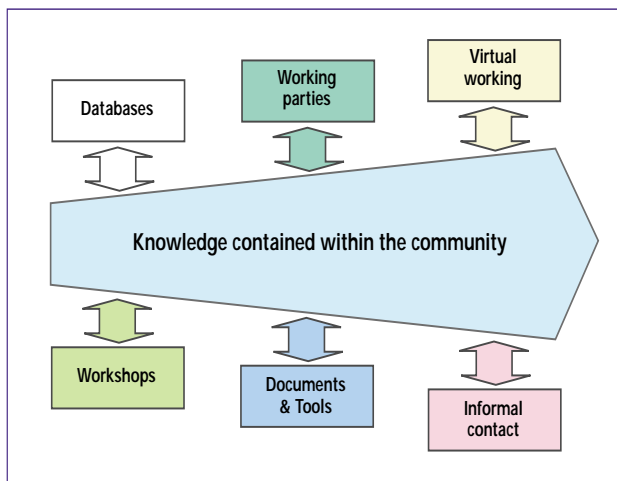


Figure 5: Means of access to community knowledge

Nevertheless, one of the most important keys to implementing an effective pm programme is harnessing the collective knowledge and wisdom of the pm community, as I have previously written about in this magazine.¹³ Companies in our networks that have involved their communities in defining their improvement programmes, and in developing the business cases, have found that they are able to define an appropriate improvement programme, to develop the metrics that relate it to corporate strategic goals, and to implement the programme with a minimum of opposition.

Equally, when external expenditure is under the microscope, leveraging the knowledge of other mature pm organizations through conferences or knowledge networks looks an attractive proposition when compared with the cost of hiring consultants, or with the time taken for university research programmes to deliver results.

As Figure 5 shows, however, there is more to harnessing knowledge from either internal or external communities than simply providing slick intranet, extranet or internet sites. Knowledge is intricately interwoven with the social networks that both validate and spread knowledge, as is being more generally acknowledged.¹⁴ It is this interconnectedness of knowledge, organization and the people who are involved with both, that also holds the key to the fifth characteristic of an appropriate improvement programme in tough times.

A concluding word on sustainability

By definition, a programme of continuous improvement must be sustained if it is to function effectively. The virtuous circle of 'measure processes → identify areas to improve → implement change → monitor progress → re-measure processes' delivers results only

when it has time to gather momentum.

One of the management books that changed the face of modern management was *In Search of Excellence*,¹⁵ in which the importance of the 'soft' side of organizations was elevated to the top of management's agenda. The book made extensive use of the McKinsey 7-S Framework, which showed the inter-relatedness of seven aspects of an organization: structure, strategy, systems, staff, skills, style, shared values.

The relevance of this to sustainable improvement lies in the linkage between the elements. At least five of them represent possible aspects of project management maturity: structure, systems, staff, skills and shared values – augmented by the more recent emphasis on process. It is in a balance between these six elements that sustainability lies.

In a sense that brings us back to where we started this article. Currently almost each week brings news of some major household name that is being forced into massive layoffs, and a vicious rationalisation programme. Those organizations that have concentrated all their pm knowledge and skills in a single organizational unit such as (say) a central programme office, are now finding themselves faced with the loss of much of their pm capability. That is why it is important to ensure that all five of the characteristics described in this article are embodied in whatever improvement programmes are initiated during the present tough times.

Those of you who manage to accomplish this may well look back on these times as a positive turning point on the path to improved corporate success, through improved project and pm practices.

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