

## Enhancing corporate performance through sustainable project management communities

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### 1. Introduction

Recognizing that project performance has a direct impact on corporate performance, many organizations undertake improvement programs aimed at transforming their project management capability. The authors of this paper have worked with organisations whose improvement programmes have included investing *inter alia* in alternative methodologies, in better project planning, in new management software, and in intensive training for project managers. In spite of considerable investment in these programs, the benefits often prove disappointing. Far more projects still fail to meet their own internal success criteria than succeed.

Research and practice of the authors of this paper has identified key reasons for the often disappointing results from programs aimed at improving project management capability. One reason is that they tend to concentrate on a narrow range of interventions and another is that they fail to build an infrastructure for self sustaining improvement. Improvement through methodologies, systems, software and training are all worthy interventions in their own right, and it is likely that any of these will achieve a measure of success. However, project management capability involves interactions between people, projects and organisations (Exhibit 1). Every part of this system must be addressed if real improvement in project management capability is to be achieved and sustained.



Exhibit 1: The Project Management Community: Projects, People and Organization (Duncan, 1998)

To reap **sustainable** benefits in terms of project management capability and outcomes, it is necessary to identify the internal project management community and engage its support in simultaneous development of the project management competence of the organization, and project team. The enterprise must develop an environment and capability that fosters effective project management and team members must have both competence to lead and manage projects, and commitment to continuing development, if projects are to be consistently successful.

The work of Human Systems Limited, on organisational project management practices, started during 1993 in response to the challenge of developing a method of benchmarking project management performance so as to identify “best practice” (Cooke-Davies, 1996). By the end of that year a group of 15 “blue chip” companies had formed themselves into a cross-industry “benchmarking network”, and set out on a journey that continues for eleven of them today. They were joined by other companies in UK between 1996 and 1998, and during 1999 there has been a rapid expansion of both membership and activity with companies based in Australia, USA, Germany and Denmark signing up to join the networks. The original concept of cross-industry networks has been augmented by single-industry networks, initially for the Pharmaceutical industry, and by intra-company networks to harvest and develop the knowledge contained within different parts of the organisation who do not normally communicate well with each other, such as facilities management with marketing, or IT with R&D.

This explosive growth has coincided with recognition firstly that the “benchmarking” method adopted by the networks has a strong theoretical basis and a degree of intellectual rigour that gives their members confidence that reliable insights are emerging from their work. Secondly, the fact that over 70% of the original membership are still actively involved after more than five years is itself a strong indication that the method delivers value to members.

When the first network was formed, it saw its function as to gather, store, analyse and disseminate data on corporate project management practices. After a year of activity, however, it became clear that the only way of being certain that “best practices” are indeed “best” is to compare the actual practices employed on specific individual projects with the performance and success of these projects. Accordingly, the networks developed a clever piece of software called a “health check tool” to gather this data in a form that is immediately useful to a project manager, while also providing research data for subsequent analysis.

It is this second instrument that provides evidence to substantiate the claim made in the opening paragraph of this paper, that far more projects fail to meet their own internal success criteria than succeed. Based on a surrogate measure of value that combines scope creep, cost escalation and schedule delay and is applied to a broad range of projects, the authors estimate that for every \$100 million of value promised by project managers in major project-based corporations to their collective sponsors, only some \$80 million of value is actually delivered.

The importance of the internal project management community has also been highlighted by work at the University of Technology, Sydney, where, in partnership with industry, research has been conducted into the project management competence of individuals (Crawford, 1998). This research, involving organisations and project management personnel from four countries across a wide range of project management application areas, has investigated the knowledge, practices and personality characteristics of project personnel. Project management knowledge has been assessed against the PMBOK Guide, and project management practices have been assessed against the Australian National Competency Standards for Project Management. Against these standards, the research indicates that there are no significant differences across countries or application areas in results for project personnel in terms of the core areas

of scope, time and cost. There is slightly greater variation in project management knowledge and performance in quality, human resources, communications, risk and procurement

Findings from this research also indicate that project personnel have personality characteristics that distinguish them from general managers and that provide both opportunities and challenges for development, for sharing of knowledge and experience and for continuous improvement of performance.

In another research project, the University of Technology, Sydney is working in collaboration with a government agency to develop project management capability for implementation of a major organisational change project. This project has involved working with an organisation that has no corporation wide history of project management either in its organisation or in the practice of its core business. The challenge has been to work with the organisation to develop the project management capability of the people, the systems and the organizational environment simultaneously and interactively.

This is the background to the authors' recognition of the vital role that needs to be played by a community of project managers.

## **2. Learning lessons from projects – why are we so bad at it?**

A consistent theme in the work of both authors of this paper is the value of involvement of people in investigating and developing their own practice. Researching and therefore understanding your own performance is a powerful incentive for change.

One of the ways in which the benchmarking networks function is to establish working parties (in effect project teams) to investigate specific topics that are of interest to network members. One such topic that was investigated during 1994 was the process of transferring lessons learned from one project to another. The working party mapped out in detail a process that has four broad steps, and that represented the most common approach in use by members (see Exhibit 2.)

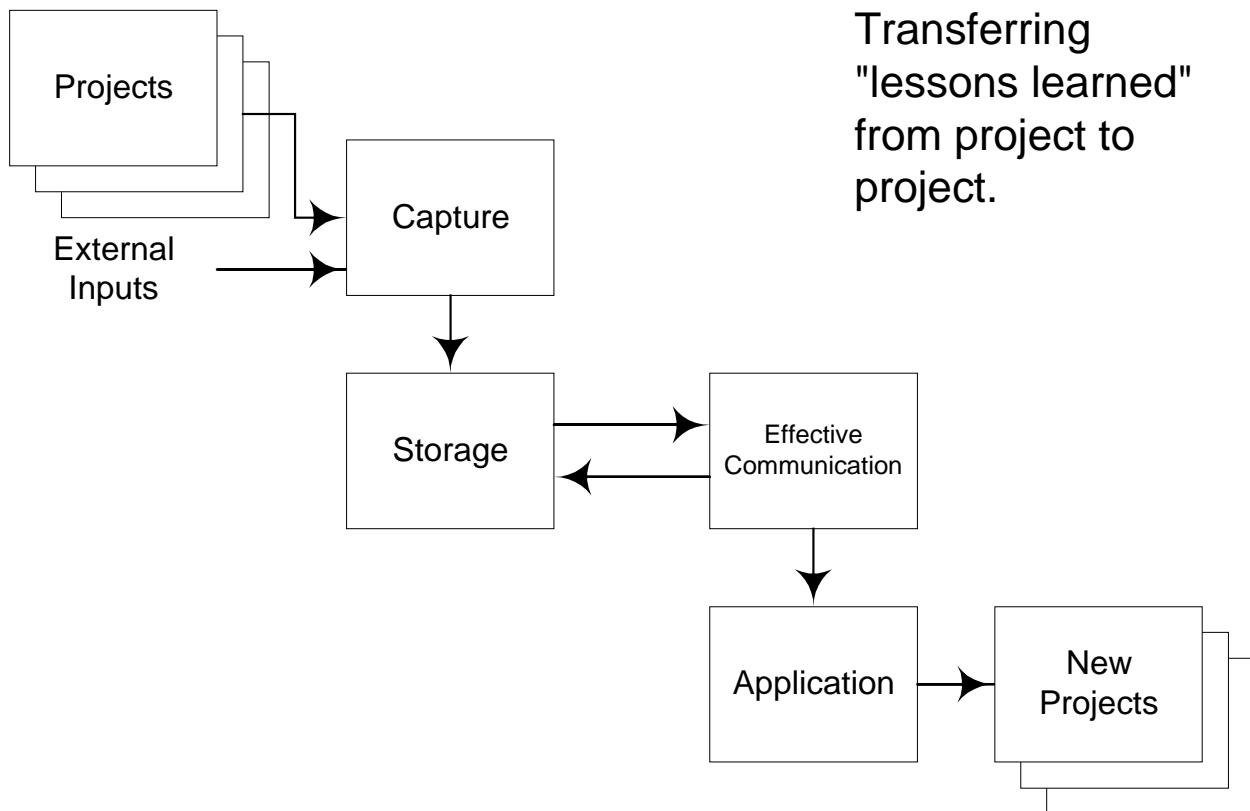


Exhibit 2: Transferring 'lessons learned' from project to project

The working party also developed an assessment instrument to measure the effectiveness and extent to which the various process steps were carried out. They concluded that whereas the process steps associated with the capture of lessons learned (post project reviews and the like) scored over 70%, this deteriorated to 65%, 58% and 25% for the remaining steps.

The UTS research provides some insight into why project managers might be poor at capturing and using lessons from past experience. When asked to rank the importance of project management practices relating to initiating and planning, monitoring and controlling and closing and capturing lessons learned, study participants ranked monitoring and controlling most highly, closely followed by planning with closing and capturing lessons learned coming a very poor third. At the same time, in terms of personality characteristics, project personnel in the study were identified as clearly more task oriented than people oriented, indicating that they will not readily take time to share their knowledge with others.

Although this paper is essentially practical in its aims, and draws on empirical research, there is a need to touch upon just one element of the theory – namely the “theory of knowledge”. People use the word “knowledge” to mean many different things, and a whole field of management activity known as “knowledge management” is emerging. Much of this seems to be in response to the challenge of creating a truly “learning organisation”.

Unfortunately many terms are used loosely in this connection, and there is no commonly accepted definition for many of them. As a result, there is a tremendous potential for “woolly thinking” and miscommunication. For the purposes of this paper, we are making a distinction between knowledge and information. The distinction that we are making is that knowledge cannot exist outside of a “knower”, whereas information can have an independent existence of its own. Information can be written down,

stored on computer or even transmitted by videotape. Information only becomes knowledge, on the other hand, when it is internalised by somebody and becomes available to them for practical application.

With this distinction in mind, it is clear that “learning lessons” on projects is much more about “knowledge” than it is about “information”, whereas the process mapped out above was a process for transmitting “information” rather than “knowledge”. Knowledge has a large tacit element, and is highly contingent in its application. In other words, when we possess high “know-how”, we are very careful to apply what we know only when it is appropriate to do so, and the greater our degree of mastery of the subject, the greater the finesse we will display in applying our knowledge.

### 3. What role does community play?

Let us stand back and think about what this means in terms of the process of transferring lessons from one project to another. On closer examination it is clear that a fault-line runs down the centre of the process, between the second and the third stages. Stages one and two occur towards the end of a particular project, and are the responsibility of an “outgoing” project team, whereas the third and fourth stages occur towards the beginning of a project and are the responsibility of an “incoming” project team (see Exhibit 3).

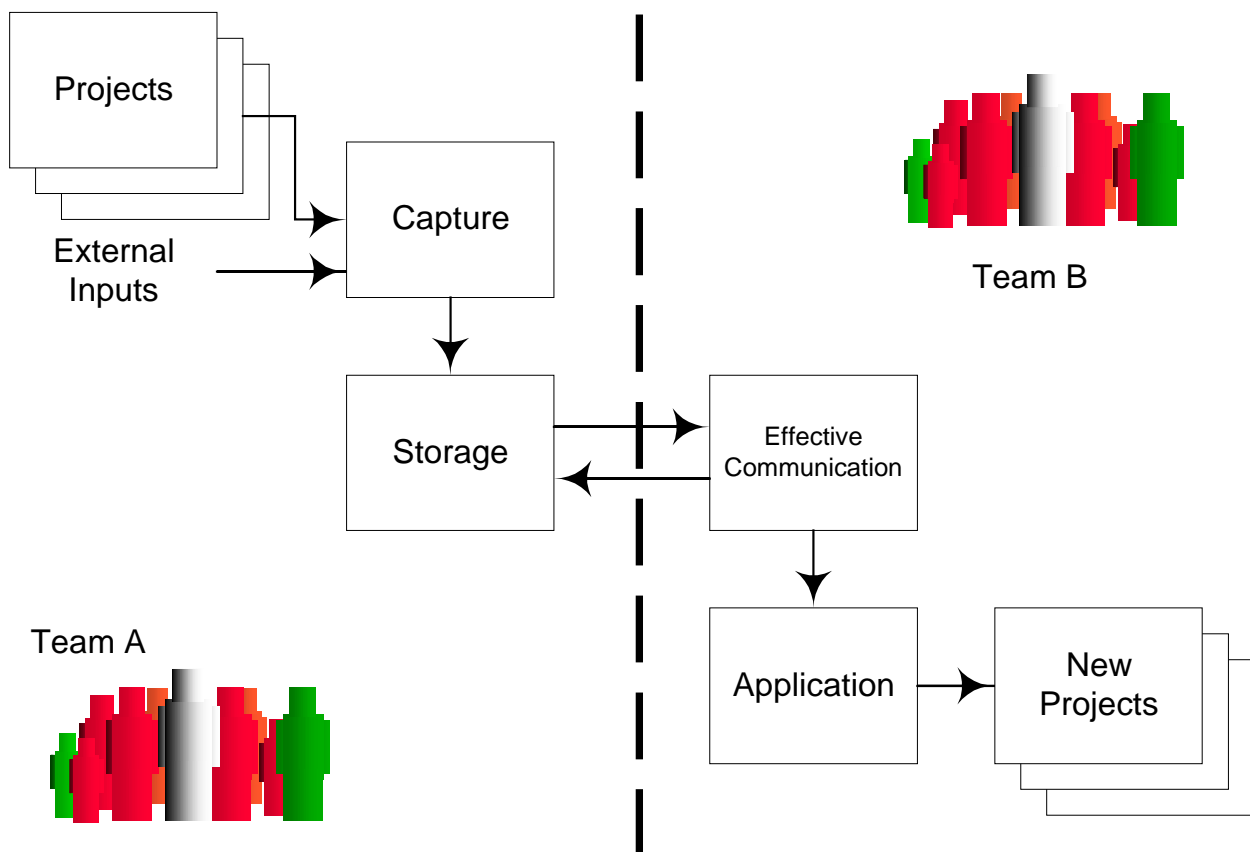


Exhibit 3: Some obstacles to transferring learning from project to project

Why should the second team learn from the first? It can be tempting to dismiss the experiences of the first project as being due to specific circumstances that don't apply in the circumstances of the new

project. There is also little incentive to learn unless the second team has a high degree of respect for the first, and are anxious to learn what they have discovered. This is much more likely if both project teams see themselves as members of a higher-level community, with accountability to all members of the community (see Exhibit 4).

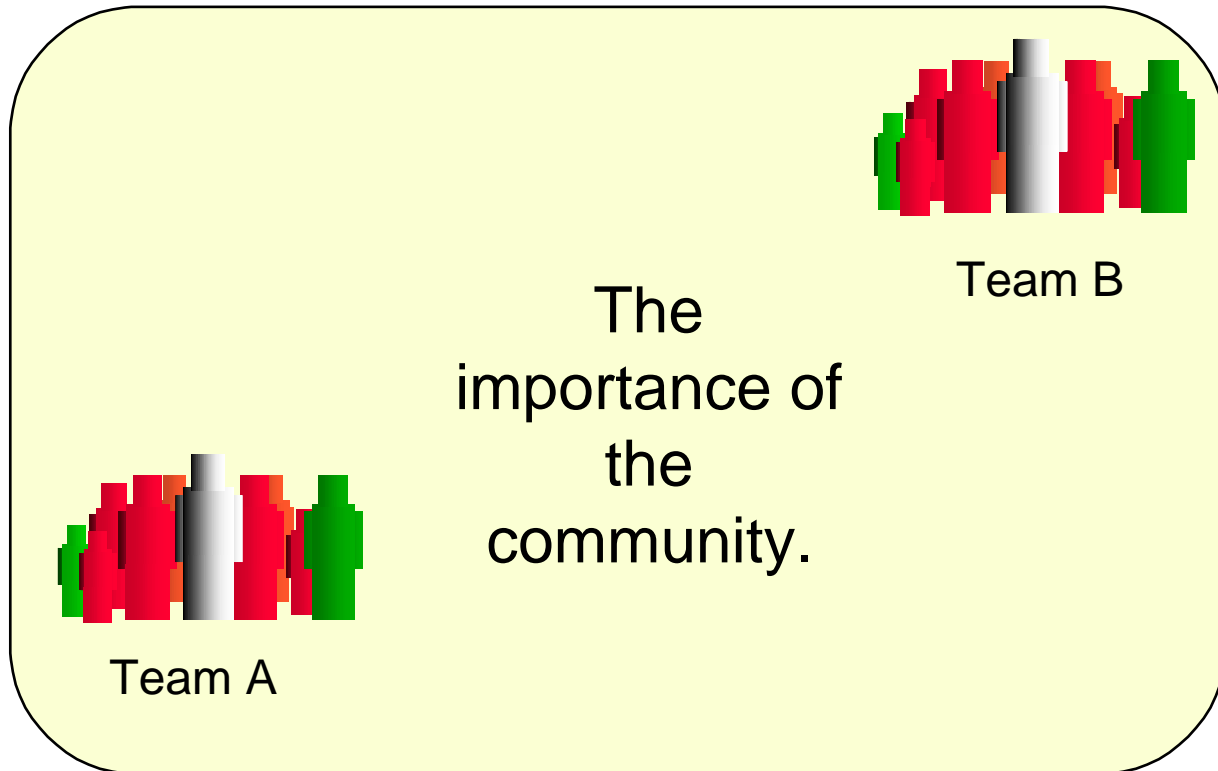


Exhibit 4: The importance of the community

This insight first led the authors to suspect that the community of project managers might be a more significant element in organisational project success than had hitherto been recognised.

Researchers at UTS, working with a major government agency to develop project management capability for organizational change, recognised early in the collaboration that any traditional approach would have difficulties due to the structure of the skill base and the culture of the organisation, which was service rather than project focused. The research team, comprising UTS researchers and representatives of the organisation, therefore adopted strategies particularly directed at capturing and sharing project management information, competencies and experiences to support the building of an effective project management learning capability. Although initially a research project within a human resource area, the methodology established (which is being progressively advanced through action research) is now being applied to assist in developing a strategic project management capability across the agency as well as in other organisations. A project management approach that would have risked being marginalised if imposed, is being embraced and developed by a growing project management community.

A further insight into community came when a major European pharmaceutical company said that it would only join Human Systems' global pharmaceutical network if it could be demonstrated that there was a valid and proven link between our method and project management performance. This question concerns the rarely-visited waters of the philosophy of science. Once there, however, one finds that community plays a critical part in the assessment of what knowledge constitutes reliable knowledge.

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Crawford, L. and Cooke-Davies, T. (1999) Enhancing corporate performance through sustainable project management communities. In: *Proceedings of the 30th Annual Project Management Institute 1999 Seminars & Symposium, 10-16 October*, Sylva, NC: Project Management Institute

The world-wide scientific community is, in effect, the custodian of what constitutes “good science”. Unrecognised by much of the world (let alone the world of project management) there has been a tacit acceptance of the “apprenticeship model”, with its roots in mediaeval craft guilds (Anonymous1958). This has enormous implications for the community of project managers within a global corporation.

So where do you find project managers throughout an organisation, and who else could legitimately constitute the project management “community of practice” in major corporations? Firstly, there is a tendency to think that only 'project managers' constitute the project management community whether that be within an organisation or in the wider profession of project management. This is clearly not the case. Many people in organisations are involved in the management of projects. They may be involved as specialist contributors, team members (and apprentice project managers), project and program directors, project sponsors and champions. It is not just those with the title of 'project manager' that constitute the project management community, but all those who participate in and contribute to projects. If you scratch below the surface of organisations and look beyond more traditionally project based areas such as construction and information technology, you will find people involved in projects in human resources, marketing, training and development, financial services, anywhere that change is occurring and products and services must be delivered.

People from all of these areas share common concerns. Some are more competent at different aspects of projects than others. There is a largely untapped opportunity for sharing of experience, development of knowledge and improvement of practice.

#### 4. How can a project management community be created?

This is the point at which the authors' research stops, and a combination of observation, pragmatism and creativity takes over. It is possible to identify seven pre-requisites for building an effective project management community within an organisation. (see Exhibit 5).



Exhibit 5: Seven pre-requisites for an effective project management community

##### 4.1 *Enthusiastic and dedicated leadership.*

Entropy is a force that every project manager knows how to deal with in the context of a project team. In the case of so nebulous a community as the community of project managers scattered throughout an organisation, it is even stronger. A prerequisite for the establishment and maintenance of an effective project management community is visible and enthusiastic leadership from a senior and respected member of the community who is senior enough within the organisation to provide top management sponsorship. It is more likely to be provided by a charismatic individual, than to be one element in the job description of someone called something like “Vice-President of Project Management”.

##### 4.2 *Determination by the community to act as a community.*

Being a community is something that human beings appear to find hard to do. Striking a balance between the individual and the collective has been the subject of numerous social experiments for as long as there have been people living in groups. Some forms seem to prove more resilient and long-lived than others, with voluntary organisations having their own form of difficulties to overcome.

Regardless of the form a community takes, a pre-requisite for its effective functioning is that all its members have a desire to be members of the community. This is often far from being the case where project managers are concerned.

#### *4.3 Acceptance by the community that their destiny lies in their own hands.*

A community of project managers across an entire organisation is rarely a formal unit within the organisation structure. Project managers can all too easily see themselves as individuals who lead project teams to deliver to their clients or sponsors the full scope of deliverables promised in the project plan. Beyond that, there is often little vision of ownership by the community of the practices, disciplines, standards, careers and knowledge of the entire community. Collective “muscle memory” is often restricted to a set of procedures written down in the corporate procedures manuals that are, in practice, seen as nothing more than “guidelines” by the enterprising project manager. According to the UTS research, project managers have little interest in externally imposed structures.

In contrast to this, the apprenticeship model requires that the community recognises its own responsibility to itself, to the community it serves, and to its own members, to operate according to the highest standards. If corporate culture prevents the reliable delivery of projects to the requisite success criteria, then it behoves the project management community to embark on a programme to change the culture.

#### *4.4 Alignment of the community’s goals with the organisation’s strategic objectives.*

The project management community exists to serve the present and future organisation in which it is housed. The parent organisation will inevitably have a series of strategic objectives. If the project management community is to be an effective power for good to the parent, then the community must accept collective challenges that align with the parent’s strategic objectives. We know of one organisation where, when the organisation as a whole was faced with the strategic need to reduce purchases across the organisation by a total of \$10 billion, the project management community accepted their part of the challenge by targeting themselves to reduce the cost of the currently authorised capital expenditure programme by \$1 billion. This translated into bringing each project in at an average of 15% below authorised budget.

#### *4.5 Ownership by the community of an effective “knowledge management” process.*

Before a community can accept challenges such as the one cited above, they must possess the means of identifying relevant data, collecting it, analysing it, and reporting on it, as well as the means of translating this information into useful knowledge for individual members of the community. This won’t happen by accident, and it is unlikely to happen simply by creating a mechanism such as a programme office. A knowledge management process includes elements of face-to-face meetings, project teams investigating little-understood areas of difficulty, reliable data that is trusted by the community and imaginative analysis of the data leading to productive conversations by the community in workshops and/or conferences.

#### *4.6 Willingness to enrol support from elsewhere in the organisation.*

Since projects do not take place in isolation from their environment, the environment itself exerts a major influence on the performance of the project management community. An effective community has to be willing to take responsibility for enrolling those people who are responsible for the environment within which projects take place – especially other communities such as top management, functional management or sales and marketing. This is easier to do if the previous five prerequisites are in place.

#### 4.7 Resources applied to activities designed to create, develop and sustain the community.

Finally, project management communities need to recognise that all of these activities require dedicated resources. A mistake that is often made is for the community to organise its conferences, for example, on the basis of a “spare time activity” for some of the more enthusiastic members of the community. Approaching things in this way is to underestimate the size and nature of the task.

As was noted above (4.2), communities are not simple to support or maintain. The trend is always towards apathy or fragmentation. For this reason, a project management community requires a fully-funded resource, skilled in community-building and knowledge management, to facilitate and support the community.

### 5.. Conclusions

So where can one start? What are the steps towards creating, developing and sustaining such a community? The process starts with a recognised leader – someone whose place in heaven depends upon an improvement in the overall performance of projects in the corporation. This person is the natural focal point for the community. A good next step is to plan an internal conference in such a way that future leaders of the community are enrolled into the vision of the community through planning the conference. The conference itself can then become the first step in the development of a knowledge management process. The community itself, represented at the conference, can take ownership of the process at this point.

A number of organisations have blossoming project management communities, which tend to be represented by names such as a Project Management Interest Group, which suggests minimal funding and support or Project Management Centre of Excellence, which suggest higher levels of funding and corporate support but may in some cases not fully engage the community. Regardless of what it is called and whether in fact the community even has a name, it is likely to fall apart or be ineffective if it does not have one or more champions and engage the interest of the community. As the UTS research shows, although project managers may have lower than average levels of sociability and gregariousness, making them difficult to get together, they do have above average levels of empathy and an inner need to be liked. So there is considerable potential for drawing upon those qualities to create opportunities for sharing of experience and creation of new knowledge that will sustain and improve overall performance.

None of this will be easy. As far as we are aware no corporation embodies all of the seven prerequisites we have outlined here, although every one of them is alive and well in one or more organisations. We believe, however, that the importance of the task has not been clearly seen before – there has been no generally accepted way of quantifying the prize, and the true significance of community has been overlooked. In our own way, the authors hope that this paper will have made a modest contribution to accelerating the trend.

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