

# Improving Performance through Global Communities of Project Management Practice

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## Introduction

Projects and project management are inherently global concepts. The Egyptian pyramids are often cited as early examples of projects but the expeditions of Marco Polo and the journey of Christopher Columbus in search of the New World are equally relevant examples, and these are clearly global projects. What is generally considered to be modern project management had its genesis in the 1950s (Stretton, 1994; Morris, 1994) when companies such as Bechtel used the term 'Project Manager' in their international work, primarily on remote sites (Bechtel, 1989).

Communities of practice are formed when people doing similar things realize they have shared interests. They recognize that there are opportunities to improve both their practices and their performance by sharing knowledge and experience. Project management as a distinct field of practice, with aspirations to the status of a discipline or profession, has been developed by practitioners who realized that they were doing similar things and shared common interests. The project management professional associations as we know them today all began in this way as informal gatherings and forums for networking, exchange of ideas and information.

Despite the strong global dimensions of the nature and origins of modern project management, project management communities of practice, with their focus on interactions between people, developed locally, becoming formalized in national project management professional associations. With the development of information technology, easier, faster and less expensive travel and an increasingly global economy, the natural communities of project management practice developed a global dimension, encouraged by global corporations and facilitated by global communication technologies. While the informal communities of project management practice became increasingly global, the formal communities, represented by the project management professional associations, tended to remain locally focused and often proprietary about the knowledge created by their communities.

The 1990's saw a growth in interest in project management as a global community of practice both formally, through the increased collaboration between project management professional associations, and informally through on-line communities of practice, attendance at an increasing number of project management conferences and other initiatives for exchange occurring outside the official channels. In the workplace, inter-organizational networking has been fostered by business trends including joint ventures, strategic alliances, outsourcing and mergers and acquisitions.

In times of discontinuous change, as organizations recognise that more and more of their operations are assuming the characteristics of projects, project management is a rapidly growing community of practice. As many of the organisations adopting project management approaches are global, and as all organisations now operate in a global economy, project management, aided and abetted by communications technology, is growing as a global community of practice. At the same time organisations have recognized the strategic importance of projects and are placing increasing pressure on project management practitioners to improve performance.

As communities of practice are now recognized as a valuable business aid to organizational learning and improvement of organisational performance (Wenger and Snyder, 2000) there is clearly a need and an opportunity for improvement of project performance through global communities of project management practice.

This paper explores the nature of communities of practice, and their manifestations in the field of project management, providing examples of the ways in which global communities of project management practice are being effectively used to improve performance.

## Communities of Practice

Communities of practice are not new, but the term has acquired new status and significance in an era dominated by the knowledge economy, the knowledge company, the knowledge worker and the concept of intellectual capital (Stewart, 1999). Communities of practice are groups of people informally bound together by shared interest, shared

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expertise and *passion for a joint enterprise* (Wenger and Snyder, 2000). According to this definition, the early Christians and mediaeval craft guilds, amongst many others throughout the history of civilisation would be considered communities of practice.

Yet the current popularity and understanding of the concept of communities of practice is generally attributed to the work of the Institute of Research on Learning (IRL), in Palo Alto, founded in 1987 and associated with Xerox's Palo Alto Research Center (Stewart, 1996) and in particular to the work of learning theorists Lave and Wenger (1991). A key finding of the work of IRL is that learning is social and in this context, communities of practice have become associated with concepts of learning, the learning organisation and by further association, with knowledge management. Communities of practice are regularly cited as fundamental to knowledge creation, dissemination and use within organisations although they are equally if not more valuable in facilitating knowledge creation, transfer and learning between individuals and across organisational boundaries.

Gardening metaphors come to mind, and are often used in reference to communities of practice, and there is a strong sense that they would be considered potentially desirable weeds rather than hothouse flowers. According to the post-1990 concept of communities of practice, as represented in the literature, they spring up where need exists and conditions are favorable and they evolve. They form of their own accord. They exist all around us. They are not created (Liedtka, 1999; Stamps, 1997) although they can be nurtured and encouraged. The 'organic, spontaneous, and informal nature of communities of practice makes them resistant to supervision and interference' (Wenger and Snyder, 2000)

A gardeners field guide for identification of communities of practice might include the following characteristics (Hildreth, 2000; Wenger and Snyder, 2000):

- Common language - the group has some sort of language of its own e.g. jargon
- Shared background - the members have some sort of shared background or knowledge
- Common purpose - the group has some sort of common purpose which gives it an internal impetus
- Creation of new knowledge - through the work of the group and the interaction of the members some new knowledge will be created for those members
- Dynamism - this relates to the social distribution of the knowledge in the group
- Evolution - there is some sort of development in the group
- More than simply social interaction
- Unofficial - it evolves rather than being created
- Voluntary - membership will generally be voluntary
- Narration - swapping war stories is a key way in which members share domain knowledge
- Informal - the group is often informal - i.e. there is no hierarchy
- Fluidity - newcomers arrive and old-timers leave
- Similar Jobs - in an organisation there will be individuals doing similar jobs
- Self perpetuating – as they generate knowledge they reinforce and renew themselves
- They benefit from cultivation but not from control

Much of the literature is concerned with communities of practice within organizations, but they are not limited to these environments. They exist across organizations, they exist in purely social settings, and they may be made up of two or three people or thousands.

As gardeners may see weeds as a threat to their control, so communities of practice may be seen as a threat by management (Spender and Grinyer, 1996) as they operate outside the formal structure of organisations. More creative gardeners, and managers, recognise the value of the interaction between the formal and the informal.

As the concept of communities of practices gains popularity, there is evidence of attempts at hothouse cultivation and the development of hybrid forms. Corporate gardeners need to be aware that these may be weeds but they are delicate. While they have the potential to spread knowledge and learning like wildfire, they are easily destroyed by an unsympathetic environment, which does not support informal collaboration and which discourages 'work-hour socializing, war story telling and water-cooler chat' and 'restricts access to the Internet – and even the corporate intranet – powerful new expansions to one's community of practice' (Dove, 1999).

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It is important to note, however, that although information technology can be a powerful tool in the hands of a naturally occurring community of practice, it can only facilitate collaboration, it cannot create it (Stamps, 1997).

## **Project Management and Communities of Practice**

Given the strong links between knowledge and communities of practice, it would seem reasonable that communities of practice would have featured strongly on the agenda of the PMI '99 Seminars and Symposium, with its theme of *Project Management: Knowledge, Learning and Wisdom*, yet a word search of the Symposium Papers provides only one instance of the term 'communities of practice' (Stephens et al. 1999) and 'knowledge management' gives only 11 hits while 'knowledge', understandably, is mentioned in over 100 of the papers, arguably as lip service to the conference theme. 'Lessons learned', however, receives mention in over 60 papers suggesting that there is in fact concern within the project management community about learning and knowledge transfer.

This may just be an issue of the terminology used within different communities of practice. For the project management community, 'lessons learned' may be the term used, whereas the general management community is referring to similar issues as 'knowledge management'. A web search ([www.altavista.com](http://www.altavista.com) – 7<sup>th</sup> April 2000) generates just under 100,000 hits for 'knowledge management' and just over 3000 for 'communities of practice'. However, a recent article in PM Network (Olonoff, 2000) raises the question of whether Knowledge Management and Project Management as 'two revolutionary disciplines' can coexist. Although the article goes on to argue that they can coexist and that 'the marriage will produce added value' (p. 64), the fact that the question might even be asked suggests some discomfort within the project management community about knowledge management and perhaps, by association, with recognizing and capitalizing on the potential of communities of practice in addressing their hot issue of 'lessons learned'.

## **Project Management Professional Associations as Communities of Practice**

Whether or not the members of the project management community who attend conferences, write for and read project management journals are comfortable with the concept, they are in fact members of a community of practice. Project management professional associations such as PMI, IPMA and AIPM are obvious examples of communities of project management practice.

INTERNET, now known as the International Project Management Association, IPMA, began in the 1960's as a forum for European network planning practitioners to exchange knowledge and experience and was therefore essentially international in its origins. The Project Management Institute, originating in North America in 1969, as 'an opportunity for professionals to meet and exchange ideas, problems and concerns with regard to project management, regardless of the particular area of society in which managers function' (Cook, 1981) began with a national focus but has increasingly adopted a global stance, with Chapters throughout the world. In Australia, the Australian Institute of Project Management was formed in 1976 as the Project Managers Forum, clearly illustrating its origins as a community of practice.

The Project Management Institute, with over 50,000 members (Goldman, 1999) and 36 Specific Interest Groups (SIGs) (7<sup>th</sup> April 2000), satisfies Wenger and Snyder's (2000, p. 140) suggestion that a community of practice can be

*...made up of tens of hundreds of people but typically it has a core of participants whose passion for the topic energizes the community and who provide intellectual and social leadership. Large communities are often subdivided by geographic region or by subject matter in order to encourage people to take part actively.*

A characteristic of communities of practice is their ability to extend across boundaries and the Global Project Management Forum (Pennypacker, 1996) continues the concept of bringing together people with shared interests. It is a focus for those who recognize that they form part of a **global** community of project management practice and provides a forum for drawing together the many threads of activity that are taking place throughout the world to develop and enhance the practice of project management.

There is a trend here. Recognition of shared interests results in fairly informal gatherings, often referred to as a forum for meeting, networking, and exchange of ideas. At some point members of this community of practice express a need or desire to define their areas of common interest or practice. They begin to think of themselves as a

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community, often referred to as a profession, and to attempt to define and delineate that profession in order to make it visible and acceptable to those outside the community. This is the point when the community begins to put in place the building blocks of a profession which include (Dean, 1997):

- (a) A store or body of knowledge this is 'more than ordinarily complex'
- (b) A theoretical understanding of the basis of the area of practice
- (c) Ability to apply theoretical and complex knowledge to the practice in solving human and social problems
- (d) A desire to add to and improve the stock or body of knowledge (research)
- (e) A formal process for handing on to others the stock or body of knowledge and associated practices (education and training)
- (f) Established criteria for *admission, legitimate practice and proper conduct* (standards, certification and codes of ethics / practice)
- (g) An altruistic spirit

From this list it is easy to identify a number of the issues that have preoccupied the various national project management professional associations as they have emerged from the more informal forums of practitioners with shared interests. These preoccupations tend to focus on:

- A defined body of knowledge
- Standards
- Certification

In focusing on these areas, project management professional associations have tended to develop proprietorial or vested interests in the products they have produced.

The delicate nature of communities of practice presents a warning for project management professional associations. Although professional associations develop from naturally forming communities of practice, as they grow, they run the risk of becoming institutionalized and bureaucratic and in this process undermine much of the value and active participation of their community. They would do well to note the characteristics of effective communities of practice and aim to remain true to these principles and their underlying values.

In particular, Liedtka (1999), points out that any organization that requires communities to sustain it, and professional associations fall into this category, must be sustained by core values consistent with those of communities of practice. Such values are not those of the marketplace. Not only will communities wither and die in environments driven by the *values of the marketplace* and lacking a *genuine concern and respect for the individual as an end rather than merely a means, but paradoxically, an authentic commitment to organizations as communities rather than as markets may enable the creation of capabilities that lead to a competitive advantage in a real marketplace characterized by change.*

According to Liedtka, an effective community has a strong moral foundation of values that

- (a) respects each individual's unique capacity to grow and, in doing so, to contribute to the community's purpose,
- (b) recognizes each member's responsibility to help those within their reach to develop their abilities,
- (c) conveys an obligation to engage in honest dialogue with each other, and
- (d) includes an un-coerced agreement to subordinate short-term self-interest in return for the benefits of full participation in the life of the community.

and *such a community will gain, not sacrifice, competitive success in making these promises to its members.*

### **Informal Communities of Project Management Practice**

While project management professional associations, as communities of project management practice, are ideally placed to aid in performance improvement by facilitating the creation and sharing of knowledge there are many other manifestations. As stated earlier information technology cannot drive the development of communities of practice, but it certainly facilitates communication and sharing that would not otherwise be possible due to lack of resources and the tyranny of both time and distance.

### **On-line communities**

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A number of active on-line communities of provide project management practitioners, anywhere in the world, with opportunities to 'seek each other for discourse, experience sharing and problem solving assistance' (Dove, 1999) Examples of these are:

**Project Management Institute:** A web communications center developed on the basis of a survey of needs of members and with a brief to "Build a 'user friendly' environment that would encourage and support a 24x7 virtual project management community." (<http://pmicenter.4-lane.com/>)

**PMNET:** An Email discussion list with over 500 subscribers, worldwide (<http://lists.uts.edu.au/mailman/listinfo/PMNET>) that has been in operation since at least 1994.

**NewGrange Center for Project Management:** started in early 1997 as a non-profit professional organization to further the discussion of project management as a professional discipline. Focusing on hands-on, practical approach to project management the Center claims that they want to know what really works, why it works and how to replicate it consistently (<http://www.newgrange.com/>)

**The Project Management Forum:** provides a mailing list capability to distribute information, on a world wide basis, dealing with the **development, support and promotion of an international project management discipline** (<http://www.pmforum.org/>)

**www.projectconnections.com** is one of a number of commercial project management portals that have been set up as virtual knowledge exchanges for those practicing project management. Although part of the site requires payment of a subscription, a considerable amount of information and opportunities for exchange are freely available. This site purports to provide 'the resources you need: a project template, a book, expert insights, a colleague with a new approach'.

### **Communities made possible through Information Technology**

The communities listed above have been established primarily as online communities of practice. There are other communities which are not restricted to or primarily geared to online communications but whose formation has been facilitated by information technology.

One of these is the International Research Network for Organizing on Projects (IRNOP - <http://www.fek.umu.se/irnop/>), a community founded in 1993 as a loosely coupled network of researchers mainly in Austria, Denmark, Finland, France, Norway and Sweden which has since grown to include Australia, Canada, the Pacific Islands, Asia, Netherlands, United Kingdom and U.S.A.. Most associates are academic researchers working on project management research in schools of business, economics and engineering. The community has no formal secretariat, staff or even strategic plan. It's members come together approximately every two years for a conference and these have been held in Lycksele, Sweden (1994), Paris (1996), Calgary (1998) and in Sydney in 2000. All notices, communications, publications and other organization for the Sydney 2000 conference were conducted through email and a web page for the conference enabling it to be presented at minimum cost to all concerned. An email discussion list has recently been set up to facilitate preparations for the 2002 conference to be held in Rotterdam (<http://lists.uts.edu.au/mailman/listinfo/irnop>).

In 1998, a number of those involved in development of project management body of knowledge documents for PMI, IPMA and APM, came together with the aim of working towards a global agreement on what constitutes the body of project management knowledge. This resulted in a community of 'recognized opinion leaders' in project management who first met in Virginia Beach, USA in June 1999, at a workshop hosted by NASA. This group is totally unaligned with any project management professional association, and the results of the June 1999 workshop are in the public domain and available at <http://www.aipm.com/OLC/>. A further meeting will be held in Haugesund, Norway in June 2000, hosted by Telenor and results will again be made freely available. This initiative, which has no official support or infrastructure, apart from the support of organizations that recognize the value of the work being conducted and are prepared to host workshops bringing the members of the community together, would not have been possible without current communications technology. Membership of the direct community is limited to those invited to participate, but results are freely disseminated via the web.

Strong pressure from global organizations and project management professionals for global project management standards has resulted in a Global Working Party with outreach to all those committed to the development of project management as a global profession supported by globally accepted and relevant standards. Membership of the

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Working Party is open to all who are interested in participating. Minutes of all meetings and relevant documents are freely available on the web (<http://www.aipm.com/globalstandards/>) and there is an associated (moderated) email discussion list, open for anyone wishing to subscribe, for dissemination of information (<http://lists.uts.edu.au/mailman/listinfo/pm-standards>).

Each of the initiatives above represents a community of project management practice with participants sharing particular interests. They exist outside any formal organization and would not have been possible without communications technology.

## **Corporate Communities of Project Management Practice**

Communities of project management practice have been forming within and between corporations as individuals and organizations seek ways to respond to increasing pressures to improve performance and outcomes. Such communities form naturally and there will be many already existing both known and unknown to their management. With the recognition of the value of such communities, some organizations have chosen to either identify and support those that exist or in some cases to encourage their formation. In either case it is important to recognize the delicate nature of this 'weed' so that it will flourish and not wither. Stamps (1997) warns that although they can't be created by management dictum or jump-started by technology, communities of practice can easily 'be destroyed by meddling – even when the meddling is a well-intentioned effort to nurture them'. Wenger and Synder (2000) on the other hand, using the gardening metaphor, suggest that organizations may potentially gain considerable benefit from communities 'started from seed'.

### **Communities of Project Management Practice within Organizations**

As project work becomes pervasive within organizations there is increasing realization that project management is being practiced in different ways within different parts of the organization – divisionally, functionally and globally. There is recognition of shared interests and of the opportunities to bring together project management practitioners throughout the organization with a view to identifying best practices as a basis for overall performance improvement. Such communities may be formal or informal but are most successful when recognized and supported. Internal Centers of Project Management Excellence and internal project management accreditation programs are a natural progression. Project offices are most successful when they support rather than attempt to regulate their project management communities

Wenger and Snyder (2000) cite both American Management Systems (AMS) and the World Bank as adopting the community of practice as the foundation its knowledge management strategy, bringing together people and ideas and spreading knowledge throughout the companies' global operations. Senior management boards sponsor communities and support teams help with community development, coordinating annual community conferences, knowledge fairs, library services and technical support.

A number of organizations, including Boeing, NASA and Ericsson have provided support for project management communities of practice along these lines. Active participation in corporate communities of practice may be considered a privilege and in some organizations is rewarded. By rewarding project managers for active participation in the Project Management Institute, NCR has had a major impact in the development of PMI Chapters throughout the world, and a number of organizations, including IBM, and Australia's Coles Myer, encourage and recognize professional certification.

### **Communities of Project Management Practice between Organizations**

Development of communities of project management practice between organizations has been most evident in initiatives that look at the benchmarking of project management practices such as the PMI supported Fortune 500 Project Management Benchmarking Forum (Toney and Powers, 1997). There is increasing recognition that for such initiatives to be really effective, emphasis must be placed on the development of relationships and trust between the parties concerned in order to foster an environment in which productive sharing of knowledge and experience can occur.

A number of organizations have been doing just this since 1993, when they decided to form a benchmarking network as an ongoing inter-organizational discipline aimed at continuous improvement of their project management practices. Facilitated by Human Systems Limited (<http://www.humansystems.co.uk/>), the organizations have been

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meeting five or six times a year and through continuity, commitment, and cooperation have developed a strong and creative community. This community has recognized the power of collaboration and has taken the initiative to foster other networks, which are now operating within Europe, the Pacific Rim and North America, and emerging in South Africa and South America as a global project management knowledge network. Through the network, organizations have been able to demonstrate to their management's improved project management performance and have enhanced the credibility and energy of their internal corporate project management communities.

As with professional associations, the development of communities of project management practice, within and between organizations, has generally begun with a local or national focus but is rapidly becoming global, driven by the needs and interests of global corporations and the recognition of more locally based concerns that they must be able to perform and compete in a global market.

### Conclusion

'A firm's competitive advantage depends more than anything on its knowledge...on what it knows – how it uses what it knows – and how fast it can know something new' (Prusak, p. ix). This certainly applies to projects, which are by definition unique, requiring innovative solutions and which, for continuous improvement to be possible, require knowledge to be transferred from one project and one team to another. Informal and formal communities of practice, such as craft guilds, have historically provided continuity and support, and have facilitated learning and knowledge transfer amongst their members.

In project management, individuals and organizations have opportunities to improve their practice through active membership and participation in a range of communities including project management professional associations, global on-line communities and formal and informal networks within and between organizations. Participation in global communities of practice, made possible through communications technology, provides learning opportunities that transcend national and organizational boundaries and make possible the performance improvement essential to remain competitive in an increasingly global environment.

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