

EXPERIENCE,
COOPERATION
AND THE FUTURE

THE GLOBAL STATUS OF THE
PROJECTMANAGEMENT
PROFESSION



EXPERIENCE, COOPERATION AND THE FUTURE

THE GLOBAL STATUS OF THE PROJECT MANAGEMENT PROFESSION

A Report from the
Global Project Management Forum
Boston, Massachusetts, USA
October 9-10, 1996

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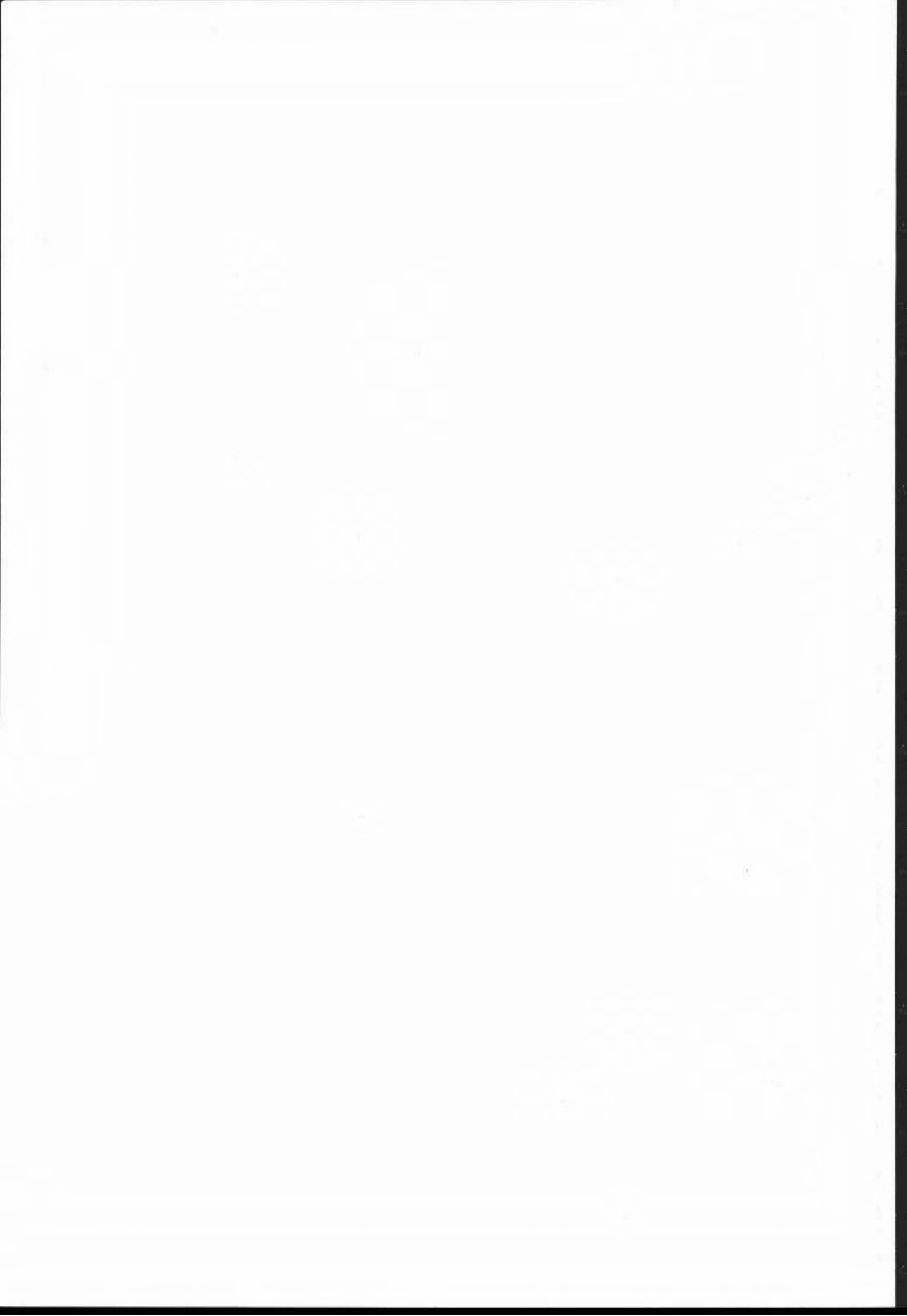
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FOREWORD

by David Pells, 1996 Global Project Management Forum Project Manager

It was an honor for me once again to lead PMI's Global Forum initiative and, along with Brian Fletcher, to plan and manage the 1996 Global Project Management Forum held in Boston during 9–10 October 1996. I believe it was another great success, as representatives from more than 40 countries participated. I also think it was another important step toward globalization of the modern project management profession.

Modern professional project management is being embraced by an increasing number of organizations and professionals across many industries, as reflected by PMI's annual growth rate of over 40 percent over the past three years. This is true not only in North America but around the world. In many countries national project management associations or PMI chapters are being formed as more organizations adapt modern project management as a major success strategy, in increasingly competitive markets and economies. Project management knowledge and skills are in great demand for career development and professional growth, as professionals recognize their usefulness in uncertain economic conditions.

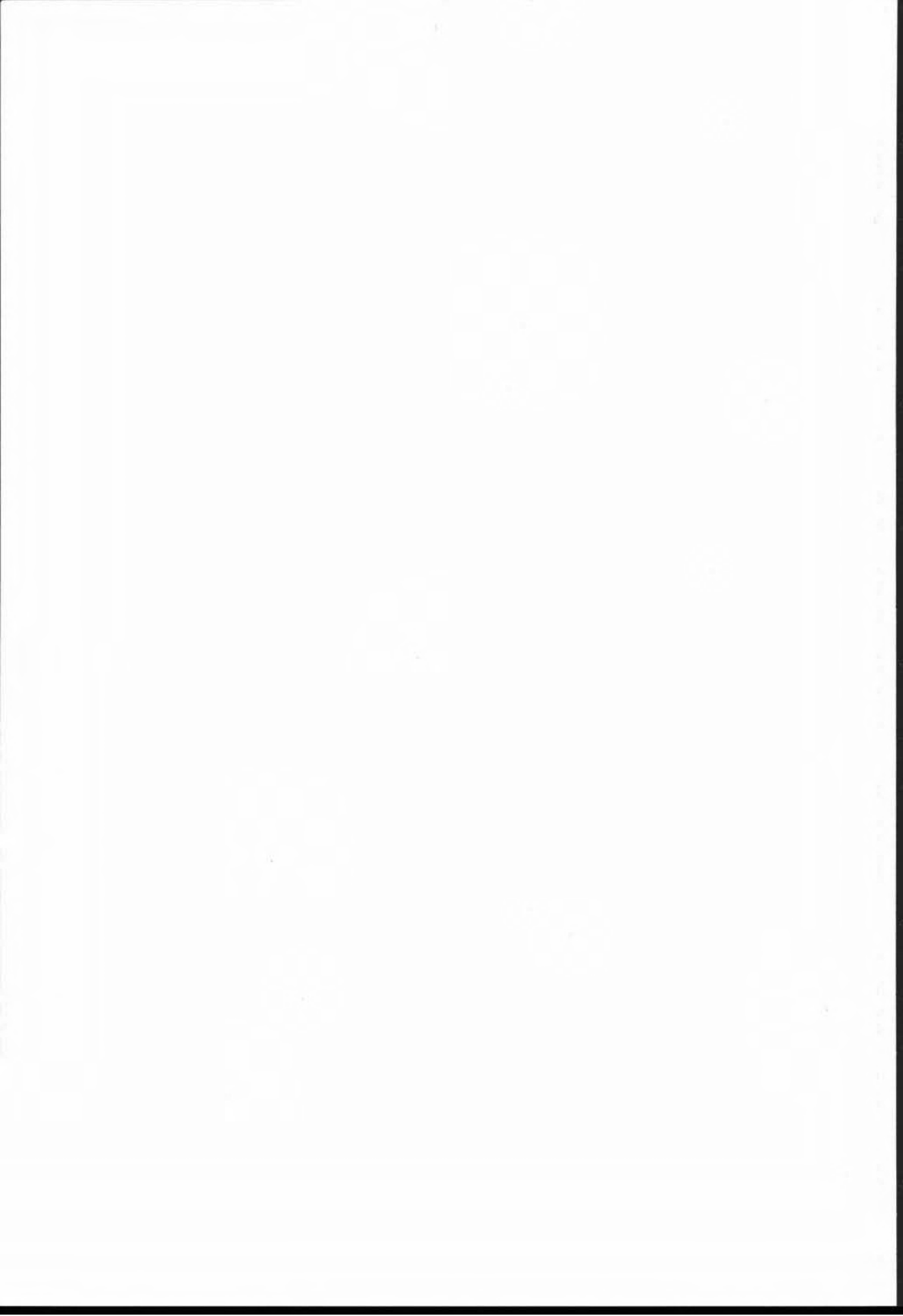
Just as importantly, modern project management is finally attracting the attention of leading academic institutions around the world, many of which are offering executive education and graduate degree programs in project management. This seems especially true outside of the United States. In countries with rapidly growing economies, leading universities are adapting U.S. and European best practices for managing technology, managing change, managing in a global economy, or managing the many infrastructure and social development projects being sponsored by multinational development banks and agencies. This is reflected by the fact that many newly formed project management organizations around the world are sponsored by or associated with leading universities in those countries.

Globalization of the modern project management profession requires that industrial organizations, government agencies and academic institutions recognize and embrace project management. Just as importantly, however, globalization of the profession requires that a common language, set of concepts and standards be established and agreed on by the world's professional societies. Professional associations are the "standard bearers" of professional project management. It is our responsibility to get organized, to establish a baseline and to advance the profession on a global basis.

This book and the 1996 Global Project Management Forum in Boston were important steps forward. As emphasized in many of the country reports in this book, however, it is important to many of our colleagues around the world that we continue these efforts. For me personally, one of the most rewarding aspects of these recent globalization activities is the way countries never before represented, such as Argentina, the Czech Republic, Indonesia, Mexico, Pakistan, and the Philippines, have been brought into the discussions. The opportunities truly are becoming global in both context and scope.

I encourage all project management experts and professionals to get involved. Attend the next Global Project Management Forum in 1997. Respect those who are contributing time and energy to the globalization efforts, and support the leaders of your local project management associations who are leading the way. Working together, globalization of the modern project management profession might arrive much sooner than any of us realizes.

David Pells, PMP
Dallas, Texas
Dec. 1996



INTRODUCTION

Last October in Boston, those who had participated in the first Global Project Management Forum in 1995 in New Orleans, or the second Global PM Forum sponsored by the International Project Management Association in Paris in June, 1996, returned to another meeting of leaders of the project management profession from around the world. Those attending a Global Forum for the first time were introduced to some of the world's leading experts, representatives of project management associations around the world, and global perspectives on current project management issues.

The 1996 Boston Global Forum was intended to continue the direction and momentum achieved with the first two forums. Globalization of our profession requires that professional leaders from all nations discuss and agree to some basic concepts. The first requirement is that we agree to meet and communicate. This is the first major achievement of the Global Forums. We now have the opportunity to meet and listen to each other, to share different perspectives, even to learn which issues are vitally important in some parts of the world while less so in others.

A second major requirement is that we identify issues of common global interest, issues that should be addressed together. This process was initiated several years ago by the leaders of AIPM, APM, IPMA and PMI, when they identified international standards and certification as issues with global importance and repercussions. This year we continued discussions related to those topics, as well as to the global Project Management Body of Knowledge (PMBOK), project management education and training, and research. The Global Project Management Forum provides a vehicle for continuing this process.

Just as importantly, the Global Project Management Forum has provided an opportunity to obtain a status report, a quick snapshot of the status of the project management profession in various countries and regions of the world. The "Country Reports" submitted by various project management organizations and leaders around the world are an attempt to learn where we are, where we should go, and what opportunities/roadblocks exist for the spread of modern professional project management.

As many of you know, in 1995 these reports were collected for the first time, published in draft form for attendees at the PMI'95 Global Forum, then included in a final book published after the Forum. The final book included not only the country reports but also speeches and results of the Global Forum itself. That approach is continuing, with this report containing the country reports as well as papers, speeches, panel presentations and results of breakout sessions from the Global Forum in Boston.

Country reports submitted from various countries are contained in this document. It includes reports from countries and organizations represented at the Forum in Boston, as well as Country Reports submitted by some who were unable to attend. In addition, this book also includes several Country Reports submitted in 1995, for which no new report was submitted in 1996, in an attempt to include as many countries and regions of the world as possible. This book then is an annual update of the Status Report published after the first Global Project Management Forum in 1995. We hope to continue this process each year, building a body of knowledge with a resulting Annual Status Report on the PM Profession which can keep us all apprised of what is happening in the PM Profession on a global basis.

For those of you who submitted Country Reports in 1995 and 1996, we encourage you to update your reports and submit them for the PMI'97 Global Project Management Forum to be held in Chicago in September, 1997. Those of you in countries and organizations not yet represented in this book, we invite you to contact us, submit a Country Report in 1997, and participate in the next Global Forum in Chicago.

The theme and format of the Boston Global Forum were expanded somewhat from those of the previous year. The Boston Global PM Forum was given the theme of "Experience, Cooperation and the Future", based on a longer one-and-a-half day format as well as the ideas of starting with current state-of-the-art professional practices in developed economies, globalization through cooperation, and future opportunities in many growing economies where modern project management is newly introduced. In Boston, therefore, we enjoyed presentations, speeches and reports from representatives from various European and American countries, Africa, India, Russia, the Asia Pacific and Latin America.

More variety was added, and a few more stakeholder groups were able to participate. The panel of representatives from the International Performance Management Council, the cooperative initiative involving the Defense

Experience, Cooperation and the Future

Departments of Australia, Canada, Sweden and the USA, was an exciting and significant addition to the agenda. The addition of several new countries to the Global Forum this year was also significant, reflecting both the spread of MPM as well as the interest in communication and cooperation among the world's PM associations.

Even with the expanded format, however, there was still not enough time to achieve every one's objectives. With nearly 200 participants from 40 countries, not every country representative had an opportunity to speak. More time was needed for the "breakout sessions". Progress in the breakout sessions by "global working groups" on standards, certification, education and other topics continues as a slow pace, based on the challenges of global virtual teams. But the addition of "Research" under the joint coordination of Dr. Roland Gareis from PMA Austria (and the University of Vienna) and Mike Katagiri, PMI's VP Technical Programs, added both momentum and range to the Global Forum agenda. This too supports the general objective to collectively "advance the PM profession."

These Global Working Groups are critical to globalization of the PM profession, and will continue at future Global Forums. This is where real issues, conflicts and cooperation can be discussed and measured, and where project management leaders and professionals from around the world can participate, and have some influence. Regional, national, economic, cultural and social differences, and similarities, must be considered and accounted for, if the PM profession is truly to become global. We encourage everyone to engage in these working discussions.

The Global PM Forums in both New Orleans and Boston included welcoming speeches by high level representatives from the Mayor's of those two American cities. In Boston we heard from Mr. Robert Wolfgang, Director of International Trade and Economic Development for the City of Boston, who described various international activities and relationships established by the city to further its own economic development. This was an interesting addition, but also raised a bigger question. What about the major cities around the world? How do they relate to a global economy? How do we factor local, regional and national governments into our professional developments and theories? In many parts of the world, governments and projects are often intertwined. So too must be the implementation and advancement of modern professional project management. And this will only increase as populations grow, creating larger cities and greater economic, industrial and social pressures.

This Global Status Report contains Country Reports from 39 countries. Perhaps next year it can contain 45 or 50. The project management profession is growing rapidly now, and spreading around the world. PMI now has over 25,000 members in over 100 countries, and is growing at a rate of over 40 percent per year. Other associations are growing and expanding nearly as fast. More national PM associations are being formed, along with more international chapters of existing PM societies such as AIPM, APM, IPMA and PMI. It is clear that modern project management is being embraced by industrial organizations and business leaders everywhere as an excellent approach to managing change, improving quality and efficiencies, and achieving strategic objectives.

We hope you enjoy and benefit from this book as much as we have. You will find the expected information in some sections, and perhaps some surprising revelations in others. The status, needs and experiences of project management professionals and organizations vary from region to region and country to country.

By sharing and cooperating, we are beginning to understand and appreciate what we have in common, and where we can advance the profession around the world. We hope the Global Project Management Forum is an initiative that will continue. We want to thank those delegates who traveled from far and wide to attend the Global Forum in Boston, who submitted country reports, made presentations and actively engaged in the discussions with their global colleagues. It is a rich and rewarding experience that all professionals can benefit from.

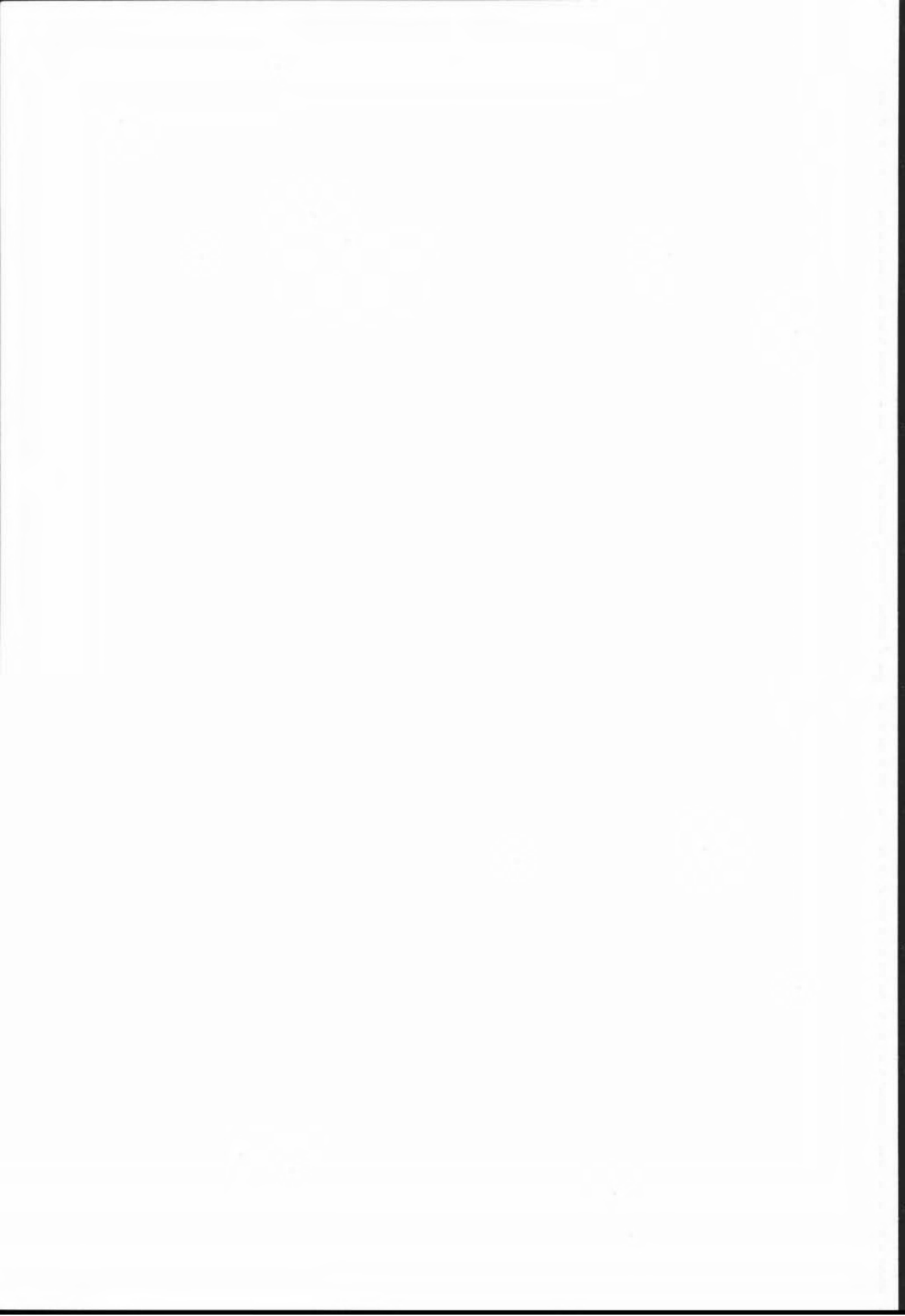
Finally, we would welcome any comments and contributions, related to this publication, the Boston Forum or plans for future events.

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FROM THE FIELD

COUNTRY REPORTS



ARGENTINA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

Project management has been practiced for decades in Argentina, as part of the discipline of other professions, to conduct "hard" projects. There are several examples in traditional project areas such as construction, civil engineering and manufacturing. As a discipline, project management is not recognized as a separate profession. Further, there is not a sufficient common understanding about project management principles and methods.

We are in a stage where "the customer," who has the need and demands the project, has started to recognize that there is a specialty for project management; the "service vendor," who is providing the project management service, has started to realize the need for improvement in the skills and methods; and "educational institutions" have started to recognize that there are people willing to learn more about the discipline.

What industries or types of **projects** are the main users of modern project management in your country or region today?

The oil, construction and hydroelectric industries are the main users of project management. The industries of telecommunications and information systems, however, are rapidly growing in the application of project management for their projects.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

In this era of constant and deep changes, the project management methodology offers a great contribution in virtually all types of enterprise. Telecommunication and information systems have a great need for more and better project management by professional project managers. Other industries, like construction and hydroelectric, will receive benefits as a result of the development of project management as a separate profession.

How can the project management profession be most effectively advanced in your country?

The project management profession can be advanced by establishing specialized education programs and promoting the need for certification. A wide campaign to show the contribution of project management disciplines among the entrepreneurs, public and private authorities is needed to gain focus on the objectives of project management, methodologies standards and set realistic expectations in the market.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

A global consensus around standards and certification will have a tremendous positive impact in the local recognition of project management as a separate profession. But those standards will only be locally accepted if they are meaningful and have the level of professionalism demanded by all types of already accepted professions.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

Besides the information in the general PMBOK, a global PMBOK must address two principal issues:

- Differences in culture and language
- Simultaneous execution of any given project in several countries.

It seems to be acceptable to use English as the language for the text, provided it is widely utilized for business purposes. But the syntax must be carefully treated to consider the difference in culture, and the vocabulary must be restricted to make it easier for readers.

The implications of managing projects in several countries have to be presented in the PMBOK. These implications deal with a wide variety of concepts, like human resources, management, procurement management, international business standards, legal systems differences and communication management, as a few examples. In consequence, the way to organize the presentation of the particularities of concept in global project management is an issue by itself.

Adding a section for global projects into the PMBOK, presenting the text in the same sequence of the main PMBOK could be good for developing, printing, maintaining, studying and consulting the subject.

How important will international "Standards" for project management be in your country or region? Please comment.

Providing that a large number of projects are under execution by multinational organizations and that those projects result from foreign investment, the contribution of international standards could be very important. It could facilitate the interaction of people in all the project hierarchy and will clarify several aspects of responsibility and accountability. Additionally, it could also contribute in the recognition of project management as a separate profession.

The real impact will depend on the actual quality and recognition of the standards.

Is project management certification of interest in your country? What type of project management certification?

The interest in project management certification is emerging. Project managers are looking at it as a way of differentiation, but the recognition from the market is still rare.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

The existence of a global project management association should improve the process of recognition for this emerging profession around the world. It will be up to the media to develop all the definitions related to the management of global projects and compile the set of standards, supported by all member organizations.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

The associations around the world should use the information highway, presently the Internet. One of the first issues to debate is the establishment of some standards for that communication to facilitate the access and sharing of information with the needed level of security and confidentiality.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The PMI Argentina Chapter, which has emerged this year, has the common purpose, organization and activities of every PMI chapter. Most of its members are from the information technology industry, because it was started by a PMP who works in that area, and was sponsored by an IT vendor. The chapter is presently devoted to enlarging its diversity of disciplines and looking for members from a wide variety of industries.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

The chapter is starting to formalize contacts with agencies and departments of government and with universities. Informal contacts have already been established, with the help of chapter members' relationships. Those contacts have shown that they are interested in exploring ways in which the chapter activities can help them. In the case of government, the interest is improving their use of project management methodology, while universities are interested in the implementation of educational programs.

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AUSTRALIA (AIPM)

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management in Australia can be considered somewhere between the level of growing and maturity. Maturity has been reached in the development and application of project management techniques and tools in some industries such as defense, construction and information technology. The level of "growing" is the wider range of industries (such as telecommunication and process manufacturing). An assessment through industries would be as follows:

- Engineering and Civil Construction: Mature with 25-30 year practice
- Building Construction: Mature with 20-25 years practice
- Information Technology: Growing, but embracing project management techniques over the last 10 years
- Telecommunications: Newly introduced, but catching up rapidly, particularly through the AIPM competency development
- Manufacturing: At best, "newly introduced"
- Defense Procurement: Totally embracing project management principles, probably assessed as still growing.
- Research & Development: Losing (?) government support, and turning to project management techniques to support commercial type operations — newly introduced.
- Public Service: All levels have actively been embracing project management techniques for 20 years. Reaching maturity
- Human Resources: The human resource industry is now starting to examine management by projects and is seeking more information.

What industries or types of projects are the main users of modern project management in your country or region today?

- Engineering and Civil Construction
- Building Construction
- Information Technology
- Oil and Petroleum
- Defense Procurement
- Public Service
- Human Resources.

Project management techniques are primarily aimed at capital works procurement. However, there is an increasing awareness among corporations of using the concept of internal management by projects. The driving force for this is to create linear organizations to cope with limited resources and keep overheads at a minimum.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

The privatization/competition of telecommunications will encourage the implementation of project management techniques in this industry. Similarly, research and development organizations and human resource organizations will seek to use project management techniques. The manufacturing industry already struggles to compete in a region that is rapidly becoming industrialized (i.e., South East Asia) — there is still some time required before this industry will move positively towards project management. Organizations will become more project orientated in the way they do business.

How can the project management profession be most effectively advanced in your country?

Through the initiatives of AIPM and the Western Australian Project Manager's Association (WAPMA) in association with Australian industry and government. The AIPM in conjunction with industry (over 55 different industry organizations) and supported by the Australian government, has now achieved the final "endorsed" documentation of the Australian Project Management Competency Standards. This document is the basis to provide a consistent method of assessment for all those who wish to be involved in the project management environment. These generic standards will be employed by specific industries to develop the industry specific standards for their project management and work place reform.

AIPM will also continue to promote activities such as workshops, seminars, a bi-annual major conference and the implementation of accreditation in Australia with the "Registered Project Manager" award.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Globally recognized standards will be welcomed by Australian project management professionals, provided they incorporate the current AIPM membership criteria and are based on the national Competency Standards. No global accreditation system can be recognized in Australia by the government unless it is based on the Project Management Competency Standards. This is the fundamental reason why AIPM was considering: bringing our accreditation process and competency standards to the table for global cooperation.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

The revised Project Management Body of Knowledge and the Core Framework for Project Management Knowledge, as currently being finalized by a group of PMI, IPMA, AIPM, APM, ENAA, are documents which we consider should be a basis for a global PMBOK. Our only concern is that this document should reflect what industry sees as the performance criteria for competent project management.

Also contained or related to the PMBOK should be globally acceptable Competency Standards that provide a series of internationally recognized levels of competency to allow "transportable" accreditation for project management professionals.

How important will international "Standards" for project management be in your country or region? Please comment.

Within the general Australian project management context, global standards would have little impact. There is already a standards base developed for national accreditation, and this is government recognized.

Is project management certification of interest in your country? What type of project management certification?

Yes. Project management certification is the primary objective of AIPM. The certification must be competency based, related to knowledge, skill and attribute. As mentioned previously, AIPM has now achieved the "endorsed" National Competency Standards, and these will be the basis of assessing project management operations to various levels of competency. It is planned that the award "Registered Project Management" (to recognize professional project managers) will be offered early in 1997.

In regards to PMP certification, there is limited interest in Australia, although AIPM has been eager to incorporate the PMP exam into our process so as to potentially allow some recognition of people who have gained PMP certification. This step is however, dependent on current negotiations with PMI.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

AIPM has always supported unified global project management cooperation. We have indicated this by our financial and human resource support towards the global project management discussions in Vancouver, Philadelphia and Sydney. I must add that it is becoming increasingly difficult to support the AIPM Board, but there is a continuing cost benefit.

AIPM has promoted, from the outset, the need to establish international standards of knowledge, competence and accreditation. The benefits have already been stated and must surely be obvious. However, if this is to occur, then a commonality for accreditation standards must be agreed amongst those organizations undertaking accreditation and those about to embrace accreditation. It is my opinion that this factor is what controls the "window of opportunity" for creating global standards and agreement. If we wait too long, institutes' will become entrenched and lose the flexibility to adapt.

Discussion to date indicates this window is still open, there is a commonality that can be exploited.

The role of any agreements or umbrella association must be limited to that of developing and maintaining international standards for Knowledge, Skill, Attributes and, as a result, levels of international recognition for certification.

The fundamental of any global cooperation must remain with national institutes. National because socio-cultural identities of each country and their individual styles of project management must be recognized and respected. Thus, any global association must have a limited function that responds to the needs of National Project Management Institutes. This is already a problem that faces PMI and IPMA — it cannot be ignored!

At this stage I am ambivalent whether the national institutes are arranged in region or industry groupings. In this part of the mechanics of a process, the best method will become apparent when the concept and objectives are established.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

The answer lies in what the global project management cooperation discussions are all about. An association or agreements that allows the world's project management professionals a forum in which to coordinate activities and communicate should be created. The Internet in itself is not an answer!

Those of us fortunate enough to have been involved in recent discussions between PMI, IPMA, APM and AIPM, where a common theme was being discussed have learned and gained much.

AIPM and WAPMA support the continuation of Global Project Management Forums as an appropriate means to promote internationalization. We would also suggest communication could be promoted through dedicated communication channels, i.e., a "home base" such as the relevant organizations' headquarters.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The Australian Institute of Project Management (AIPM) evolved from a group known as the Project Managers Forum which was established in 1976. The success and growth of the Forum led to the formation of the AIPM in 1989.

The Institute is the only national body which serves as a unifying influence for project management in many industries, including construction, computer software, chemical, petrochemical, manufacturing, mining and every other industry that manages projects.

The Institute is a voluntary body, working for the benefit of its members.

VISION

Professional project management is recognized as an integral part in the delivery of every project.

MISSION

To position the Australian Institute of Project Management as the embodiment of professional project management.

OBJECTIVES

The objectives of the AIPM are to:

- Promote a professional approach to project management
- Advance the discipline of project management
- Promote the self-development of project managers and members of project teams
- Encourage the study of project management
- Increase public awareness of the value of project management.

AIMS

In its pursuit of professionalism in project management, the Institute aims to provide the following services:

- Dissemination of best practice information on project management
- Continuing education management education and training courses
- Accreditation of project management education and training courses
- Certification of project managers as project management professionals
- Maintenance of national competency standards
- A Code of Ethics for project managers.

CHAPTERS AND AFFILIATIONS

Most activities of the Institute are undertaken at chapter level. Chapters are established in Adelaide, Brisbane, Canberra, Melbourne and Sydney, with a growing demand for chapters in Hobart and Darwin. The Western Australian Project Managers Association (WAPMA) works closely with the AIPM.

The Institute has a cooperative agreement with the Project Management Institute (PMI) in North America, and maintains close liaison with the Association of Project Managers (AIPM) in the UK, and IPMA in Europe.

BENEFITS IN MEMBERSHIP

- Seminars and Workshops
Chapters conduct ongoing programs of seminars and workshops on typical issues relevant to project management and to highlight interesting projects, both local and overseas. Workshops are held to update members on specific tools and techniques of project management. Seminars and workshops promote an environment of fellowship and the opportunity for

Experience, Cooperation and the Future

business and social contact with peers and other working project managers.

- Publications

Members, associates and students automatically receive the Australian Project Manager, the official journal of the Australian Institute of Project Management. Overseas associates may also receive the journal for a small fee to cover postage and handling. Chapters publish a regular newsletter to inform members of local activities and news.

- National Conferences

A national conference is held bi-annually and provides the opportunity to benefit from new ideas and techniques and to meet and make contact with others interested and involved in project management.

- Personal and Professional Development

As well as broadening and deepening their knowledge of project management by attendance at seminars, workshops and conferences, members can serve on a chapter's standing and special purpose committees to work with others in promoting professionalism in project management.

MEMBERSHIP IN THE INSTITUTE

All people with an interest in project management are encouraged to join the Institute.

The Australian Institute of Project Management has the following Grades of Membership: Honorary Fellows who are distinguished persons whom the Institute wishes to honor; Fellows who have made a significant contribution to the profession of project management; Members who are or have been practicing project managers with demonstrated qualifications and experience; Associates who have a substantial interest in project management; Overseas Associates with an interest in project management may be affiliated with the Institute; and Students who are enrolled in an appropriate course of study.

In addition, the Institute provides for: Registered Project Managers who meet professional standards set by the Institute and Company Associates. Companies and other organizations can become affiliated with the Institute. This affiliation allows financial sponsorship of individuals as Fellows, Members, Associates and Students at reduced subscription fees. Certain grades of membership entitle members to vote, use post nominals and participate in committees.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes, AIPM has strong relationships with various levels of government departments. We have membership levels with Department of Defence, Australian Construction Services and Telecom.

We also have responsibility limits/levels through the Project Management Competency standards to the "national Training Board" and the "Australian National Training Authority."

AIPM has encouraged and established links with the University of Technology (Sydney), University of N.W.W., Queensland University of Technology, Royal Melbourne Institute of Technology, South Australian University and others. The links are strong where AIPM has produced a draft "Reference Curriculum" for Master of Project Management courses. These universities are asking AIPM to provide accreditation for their project management courses.

AUSTRALIA (WAPMA)

Note: Submitted by the **West**ern Australian Project Management Association (WAPMA). The region in which WAPMA operates is in the State of Western Australia. The Australian Institute of Project Management (AIPM) has chapters in five of the remaining seven states and territories in Australia.

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at **what** stage is the project management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

The project management profession in our region is at a growing stage in most industries and fairly mature in some industries.

What industries or **types of projects** are the main users of modern **project** management in your country or region today?

The following industries are represented by our membership and use modern project management to some extent:

- Building
- Utilities
- Defense
- Construction
- Consulting
- State Government
- Transportation
- **Information** Technology
- Resources

Some industries tend to use modern project management which is often controlled by multinational engineering firms.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

The resources section, in particular the mining industry, local governments and state government's change programs have the greatest need for more or better project management.

Many organizations, both private and government, are following a worldwide trend of "Managing by Project" and as such have a need to heighten their awareness and skills in project management. However, many (most) of these organizations are not consciously aware that what they are doing could be enhanced with the application of project management principles, techniques and tools.

How can the **project** management profession be most effectively advanced in your country?

The project management profession can be best advanced in our region by continuing our project management professional (PMP) program and support for the Masters in Project Management at Curtin University. We must continue to work with the AIPM to implement the nationally accepted set of project management competencies based on those areas as outlined in PMI's Guide to the Project Management Body of Knowledge.

What impact will globally recognized **project** management standards or certification have on the project management profession in your country?

Our membership has a stake in the recognition of any global project management standards **and/or** certification. WAPMA has successfully conducted four series of workshops leading to the taking of the PMP examination: 135 members have attended these workshops. One hundred and **twenty-**

Experience, Cooperation and the Future

three of these have sat the PMP exam. The programs run in 1993, 1994 and 1995 produced a total of 84 new PMPs. We are waiting on the results of the 33 members who sat the exam in June 1996. We have very strong expressions of interest for our 1997 PMP program.

WAPMA is assisting the Australian Institute of Project Management (AIPM) in offering the PMP process to their membership. A series of 3-day workshops prior to the December 1996 PMP are being planned. WAPMA is also working closely with the AIPM on the Australian National Competencies for Project Management and will be leading an assessment of the alignment of the PMI's Guide to the PMBOK and the overall PMP process to these competencies. See AIPM's submission for a description and status of the Australian National Competencies.

While the overall profession of project management will be enhanced by globally recognized standards and/or certification, there is a need to recognize cultural and political differences at a national level. Cooperating and collaborating with other project management organizations is the only way to have a single and truly globally recognized professional certification.

ISSUES OF COMMON GLOBAL INTEREST

Those knowledge areas of project management which are common across international boundaries.

How important will international "Standards" for project management be in your country or region? Please comment.

See above.

Is project management certification of interest in your region? What type of project management certification?

See above. There is a need for certification of project management professionals, with PMI's PMP as a possible model. There is also a need for a more stringent certification of those persons who perform the duties of the project manager, with AIPM Registered Project Manager as a possible model.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

WAPMA fully supports open communications and cooperation between professional project associations/institutes as well as individual project management professionals.

WAPMA prefers a federation of national associations/institutes. Subject to further study, an organization modeled on the International Council of Management Consulting Institutes (ICMCI) is preferred. There are currently 20 member associations/institutes in the ICMCI. The ICMCI consists of six elected officers and one or more voting representatives per member association, depending upon the size of their organization. This federation could be called the "International Council of Project Management Institutes" (ICPMI).

The objectives of a global organization should include the following:

- A uniform body of knowledge
- A recognized worldclass certification for project management professionals
- Full reciprocity between national associations/institutes
- Mentoring and nurturing professional associations in developing countries
- Enabling project management professionals to practice freely across national boundaries.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

The "ICPMI's" web site on the Internet would enhance communications between member institutes and individual project management professionals. Cooperation can only be achieved when the member institutes can put aside their purely nationalistic views and prejudices.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

WAPMA was formed in 1982 by individuals from the building and property development industries. Its membership now has a much broader base with members from more state government bodies in transportation and utilities. There is also a smaller, but growing membership from other industries, such as information technology, manufacturing, engineering consulting and project management consulting.

WAPMA conducted its first Project of the Year competition in 1996. The successful project, East Perth Redevelopment, participated in PMI's Project of the Year competition.

WAPMA's Vice President is on PMI's Education Committee as the Region 1 (all PMI members outside the USA) representative and on the subcommittee for developing study materials in support of the Guide to PMBOK.

WAPMA is administered by a Council which has an executive function and committees which are active in such areas as practice, education, membership and standards. It also liaisons with national and international project bodies. It has the following classes of membership and current members:

Life Members 2, Fellows 1, Members 169, Associate Members 50, Student Members 2, Total 224.

WAPMA has cooperative agreements with both AIPM and PMI.

Does your organization have established relations with agencies or departments of government, or with universities? Please describe.

WAPMA was instrumental in the establishment of a Masters in Project Management (MPM) program at Curtin University. The MPM program started in February 1993 and takes three years part-time or one-and-a-half years full-time to complete. It has an annual intake of about 20 students each year, with its first graduates in December 1995. WAPMA continues to play a supporting role in this MPM program.

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AUSTRIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

Industry

- Different in different industries: Engineering, **EDP**, Construction are far advanced, public administration and service industry are growing.

University, Consultancy

- Growing in importance.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

All project types; importance of internal projects (organizational development, marketing, etc.) growing.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of the professional **project** management in your country? Why?

Public administration, because of the financial pressures.

How can the **project** management profession be most **effectively** advanced in your country?

University Programs (in the long run), Public Relations-activities by the national Project Management Association (PMA).

What impact will globally recognized **project** management standards or certification have on the **project** management profession in your country?

It will positively influence the development, but cause limitations because of language barriers.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

Generally applicable definitions and standards; no rigid project management methodology.

How important will international "Standards" for **project** management be in your country or region? Please comment.

See above.

Is **project** management certification of interest in your country? What **type** of **project** management certification?

Yes, certification of project managers.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

No further formal organization is required. But networking and cooperation between the existing organizations need to be professionalized.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Providing budget for meetings, common EDP databases, etc.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

PMA was founded in 1986. At the present time, PMA has 186 personnel, 20 corporate and 24 student members. It publishes the *Projekt Journal* once a year and the newsletter *pm-gruppe-news* three times a year as well as various papers. PMA is represented on the WWW within the *pm-gruppe*.

PMA already held two conferences this year and is going to organize a third one together with the Project Management Institute at the University of Business Administration in Vienna under the headline of "Projects and Best Practices."

Up to now, 50 project managers in Austria have been certified and 28 are in the process of being certified. The interest in both, company — external and internal performance of the certification program, is growing constantly. Besides the certification program, an educational program ("PMA Project Manager") has been running since January 1996. A new management program ("The New Management Paradigm") is planned for 1997.

PMA is contributing to the research program "PM Benchmarking" within the *pm-gruppe*. The goal of the program is the development of a systemic-constructivist procedure for the benchmarking of PM-Processes.

Does your organization have established relations with agencies or **departments** or your government, or with universities? Please describe.

PMA is a member of the *pm-gruppe*, which is a closely coupled network of PMA, the PM-Institute of the University of Business Administration Vienna and of Roland Gareis Consulting Ltd.

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BRAZIL

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing or mature)? Please comment.

Project management has been recognized as a differentiated professional activity in Brazil since the 1970s: a) in business, with the development of the petrochemical industry and large hydroelectric plants; b) in academy, with the creation of the first graduate programs in technology management; and c) in associative terms, with the creation of two local project management groups, one of them affiliated with PMI (they were disbanded in the 1980s). Its current stage can be defined as growing.

What industries or types of projects are the main users of modern project management in your country or region today?

Project management concepts, approaches and tools have been used at different levels of sophistication in several industries — both in the private and the public sectors. Some examples of the more traditional users are: engineering design and construction companies, R&D institutes and centers. The country's growth with macroeconomic stability and greater foreign competition is promoting the intensification of the use of project management in less traditional areas, such as development of new products by industry, banking and software.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of the professional project management in your country? Why?

The greatest need — in terms of the gap between the necessity of rapid improvement in managerial effectiveness and the current systemic level of competence — is in the area of public social services, mainly education and health. The processes of privatization and deregulation of public utilities such as transportation, telecommunications, energy and sanitation pose a great opportunity for the growth of the project management profession in Brazil. Industry's need to develop new products in a "concurrent engineering" environment poses another great opportunity.

How can the project management profession be most effectively advanced in your country?

Project management is relevant in order for management to cope with the new business and public administration paradigms. The profession can be most effectively advanced by: a) mainstreaming project management courses in selected undergraduate high education programs, b) using traditional training and continuing distance education tools for professional recycling, c) establishing a network of practitioners and researchers in project management; and d) creating a publication.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

In terms of recognition, it will have an impact on the professionals involved in the economic activities that have an international character. It will not have an impact in the less developed areas of the country nor in industries and activities that are inward-oriented.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

A global PMBOK should combine common terminology and general guidelines with national and regional (multinational agreements, such as the Southern Common Market) standards, practices and references.

How important will international "Standards" for project management be in your country or region? Please comment.

Taking into account the positive experience of ISO 9000 standards in Brazil (more than 1,000 firms certified during the 1990's), it is presumable that international "standards" in project management will be well received--especially if they are consistent with quality standards to which firms and organizations are becoming accustomed.

Is **project** management certification of interest in your country? What type of project management certification?

There are contradictory movements of deregulation and greater surveillance in Brazil (e.g., quality and environment certifications). The issue of a specific project management certification (of companies, systems and professionals) will have to be debated thoroughly with the interested parties.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

The diversity of national and regional situations suggests a flexible frame for such an entity, more a network than an organization.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Communicate via Internet; cooperate by sharing experiences; international meetings in different parts of the world; joint continuing education programs (via distance education); use the academic links in each country to facilitate interchange, etc.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

Currently, there is no professional project management organization in Brazil. Marcio Prieto, a former President of the PMI chapter, serves as liaison with PMI, and has been developing a base to reestablish a local network or organization.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

In an effort to reestablish a visible "locus" for project management, Marcio Prieto has approached the academy (via University of San Paulo's Center for Technology Policy and Management which has been continuously involved with project management for more than 20 years), consulting firms in project management and other interested parties.

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CANADA

FOREWORD

The PMI-Canada Country Report is a collation of observations from PMI-Canada project management knowledge experts in an issue of competence of the project management discipline. As such, it represents a particular profile of the business of project management in Canada.

Two factors stand out. These are that there has been a continuing investment in major Canadian projects both internationally and nationally. In particular, the Canadian government has sponsored three infrastructure programs over the past 10 years aimed at improvement in the overall Canadian economy. The early programs concentrated on investment in a wide range of transportation system upgrade and national centers of scientific excellence. This was followed by an additional funding program aimed at detailed improvement to infrastructure. The current federal government infrastructure program is aimed at "strategic investments" which will create immediate jobs and long term opportunities to make the Canadian economy more competitive. The project management discipline has been an imperative of these programs since 1983.

Industrial project work in Canada lies in infrastructure and international projects in power, mining and transportation with some petrochemical, pipelines and telecommunications. The government, financial and services sectors have moved to implement leading edge information and communications technology. For example current federal government programs are being reengineered with significant information technology projects in support.

Also, it is clear that there is a need for research as a tool to improve the techniques of the current project management style. Project management practices were formalized some 30 years ago. The current Project Management Body of Knowledge, now being marketed as suitable for worldwide use, is simply an "institutionalized" version of such practices. There is a fundamental and urgent need for research into objective measurement of application of "project management practices and tools."

PMI-Canada organizational development issues commit to building an integral national entity with all the benefits and advantages that alliances with other national and international organizations bring and, as well, developing into an organization that best serves Canadian project management professional interests.

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management in Canada can be traced back to the 1920s primarily in connection with infrastructure and industrial projects. Since then, the large share of Canada's Gross Domestic Product allocated to these capital-intensive areas has contributed to the development of an advanced Canadian project management profession.

Today, project management practices can be found in all business and government sectors. Despite such knowledge, there remain many opportunities where project management practices can be introduced for "soft" or "management" projects.

Initially, the policy was implemented on the most visible projects called Major Crown Projects which focused solely on dollar value. In 1991, a major policy revision shifted the emphasis to risk assessment. High dollar value but low risk projects were to be managed with less overhead than lower

dollar, higher risk projects. In 1994, this philosophy was extended to all projects. At that time it became clear that projects in the information technology field were not benefiting from the basic policy regime. An Enhanced Project Management Framework for Information Technology Projects has been approved by the federal government's Treasury Board.

In 1993, after cooperative development by five government departments and four industry associations, a new Canadian National Standard had been approved, the **Cost/Schedule Performance Management Standard (C/SPMS)**. The project management policy base was adjusted in 1994 to reflect a requirement for earned value measurement of government projects. This reflected two mutually supportive policies of "value for money" and "project performance measurement."

What industries or types of projects are the main users of modern project management in your country or region today?

Capital projects within the industrial sector are the most advanced in the use of project management practices. Owners, designers, contractors and manufacturers have, over the years, developed effective project management methodologies which have evolved into a common set of business practices. Canada has world-class leaders in infrastructure, aerospace, electronic, communications and marine equipment projects. Canadian geography has made Canada a world leader in satellite and telecommunications installations.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

All sectors could benefit from improved project management. Opportunities for professional growth should come with PMI-Canada's advancement of the project management discipline.

How can the project management profession be most effectively advanced in your country?

A Canadian project management profession can be most effectively advanced by establishing project management standards as the basis for professional certification, and by having provincial governments as the "professional" authority in Canada, acknowledge a certification process.

University programs, research in project management, training and fostering the exchange of ideas and knowledge amongst project management practitioners are other avenues for developing the profession.

To be useful to the Canadian government and industry, convincing evidence of the "value added" by project management is required. Also, in government, changes in financial legislation away from single year lapsing appropriations towards multi-year, non-lapsing authorities is also required. More senior managers need to be trained in the nature of project management, whether they are project managers or departmental managers.

In particular, there is an urgent need for fundamental research into the use and effectiveness of currently "generally accepted practices" and competencies espoused for the project management discipline. In essence, there is a need to both provide objective and substantive evidence of effectiveness of Project Management Body of Knowledge practices and evidence to support the use of project management. Too often an avalanche of qualitative evidence is available but little evidence of measurable results.

In Canada, provincial jurisdictions must establish their own professional standards and admission processes with which they are comfortable. Clearly, this implies the need for an independent national coordinating body.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Provided that the standards are meaningful and at a truly professional level, the impact would be a very positive one. If, however, the standards are trivial in the eyes of the international project management community, then there could be a very negative impact.

Currently, Canadian industry and government is faced with a number of project management standards. Some of these are those of the International Standards Organization, PMI's Guide to the Project Management Body of Knowledge, Software Engineering Institute's Capability Maturity Model and the Canadian government's **Cost/Schedule Performance Management Standard**. Each is applied in particular project undertakings. A rationalization of these management standards is required to permit application in a coherent and coordinated fashion.

The regular reports of the Canadian Auditor General to the Canadian Parliament espouses a philosophy of "value for money" in Canadian government programs. The Auditor General reports in detail on all aspects of government social and operational programs from health to national infrastructure systems. Many of these reports contain penetrating comments on the conduct of projects in support of government programs. For example, the 1995 Auditor General Annual Report Chapter 12 dealt with information technology under the title "Systems Under Development: Managing the Risks."

A flurry of activity has followed comments made by the Auditor General about project management shortcomings in major information technology projects. Treasury Board is spearheading an effort to get all departments to define and implement improved practices. Compliance has almost become an industry of its own as companies rush to raise their capabilities and get recognized.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

There is no reason why a Project Management Body of Knowledge should be restricted in any way. One may envisage that any information that is of use to the profession should be included, notwithstanding potential overlap with other management disciplines.

The issue, however, is what should be learned by project management practitioners at various levels of competence. The answer is probably as diverse as is to be found in the teachings of other academic disciplines. The principal overriding consideration would appear to be the specific area of project management application being taught.

A project has been established to examine the potential for a Canadian extension to the Project Management Body of Knowledge. Views and input have been solicited. PMI-Canada projects, currently under development, will provide the impetus for progress in this area.

How important will international "Standards" for project management be in your country or region? Please comment.

Project management standards are essential if the intent is to be recognized as a "profession." However, if standards are established, then project management **professionals** must be prepared to be held accountable in a court of law for meeting those standards. This is a very important issue in the drive to install project management as a profession and one that cannot be treated lightly.

Is project management certification of interest in your country? What type of project management certification?

The current interest in the Project Management Institute's professional program is a good indicator of the general interest in such certification. If a meaningful certification standard can be established

with government recognition, then there is certain to be a widespread and strong interest in obtaining the credential.

PMI-Canada is pursuing project management professional program improvement and adaptation to meet Canada's requirements. One initiative in this regard was the 1996 Project Management Professional Survey conducted by the Northern Alberta Institute of Technology.

Another example is the active certification program of the Ottawa Valley Outaouais Project Management Institute Chapter. From 1993 to 1996, some 600 candidates have taken the examination preparation workshops. These workshops have raised the level of interest in the practice of project management in both the public and private sectors of the Canadian National Capital Region.

The Ottawa Valley Outaouais Project Management Institute Chapter has formalized the management of its Professional Certification Examination Preparation Workshop program by conducting a significant upgrade to the 10 sessions of introductions, orientation, eight project management processes and review. A Professional Program Review Board has been established for independent critical review of the Workshop. Further, in the interests of a collegial cooperation, the chapter will share, on an international basis, the results of this Canadian Chapter-developed Certification Examination Preparation Program. The **Workshop Participants Manual** is of particular value having been subject to quality assurance audits and learning criteria assessment.

At the present time the Association for Project Management and Project Management Institute have professional certification programs. Additionally, the International Project Management Association has recently introduced a certification program to European members. Notwithstanding these initiatives, at this time there is no effective, defensible project management certification program. Accordingly, this mitigates against unqualified support for evangelical work in support of the Project Management Bodies of Knowledge and emphasizes the need for a single objective standard. One that can be used to develop project management practitioners whose work can be measured in matters of competency and practice.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

A global project management association represents a unique opportunity at this point in time. Provided that it is properly structured, such an association can bring together an emerging profession on a consistent basis around the world.

To be effective, the global project management organization cannot be seen as being dominated by any one national organization. The association should be a federation of member national entities. A global project management association must be perceived as being "non-aligned" with any one country, otherwise it simply will not work.

The mission of a global project management association needs to be stated in terms of services to member country organizations, and it should include such things as:

- Providing a vehicle for the establishment of a set of international standards that are endorsed by all member organizations
- Coordinating the use of resources around the world in **carrying** out special projects that are of interest and benefit to all member organizations
- Acting as an international spokesman for a project management profession
- Providing professional certification guidelines to be used and modified by national organizations to reflect the unique requirements of any national jurisdiction
- Working to establish a universal project management classification system.

While the details of international organization are subjected to ongoing global forum discussions an immediate need is the putting in place of a Global Project Management Forum coordinating office. This office, The Global Project Management Forum Secretariat, could provide immediate and

continuing coordination of contacts and information on international ventures and initiative global forums seminars and other cooperative undertakings.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

With the Internet and all of the technical innovations and changes that are occurring every day now, the world is truly shrinking. Our ability to come together, to meet, to discuss and to make decisions is rapidly becoming economically possible. The cost of travel is no longer the dominant reason for keeping us apart.

To this end a PMI-Canada Web Site has been established on the Internet. The PMI-Canada home page provides up-to-date organizational information and allows a reader to access the activities of geographically dispersed Canadian chapters. The Internet address for the PMI Canada Web site is <http://www.pmicanada.org>.

Canada is a large country with PMI-Canada members separated by vast distances. Accordingly, PMI-Canada will move, in the immediate future, to Internet personal and group conferencing. Effective use of the Internet, now at an affordable cost, is one leading edge telecommunications mechanism that should be immediately embraced by the Global Project Management Forum.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

PMI-Canada was officially formed with the signing of an intersociety cooperation agreement in May 1995 and incorporated as a Federal Canadian not-for-profit entity in April 1996.

PMI-Canada Guiding Principles have been approved for the next phase of development. These "Guiding Principles" commit to building an integral national entity with all the benefits and advantages that alliances with other national and international organizations bring and, we hope developing into an organization that best serves Canadian project management professional interests nationally and internationally.

An immediate thrust is to promote PMI-Canada as the organization of choice by governments and corporations seeking to strengthen their project management professional and provide a national forum to concentrate, discuss and advance project management issues of concern to Canadian project management practitioners.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Such relationships are in the formative stage. A partner arrangement with representative Canadian companies and professional technical associations was recently put in place for the 1996 Calgary National Project Management Symposium. Close working relationships are contemplated with Canadian engineering, architectural, medical, legal and information technology associations.

On the international scene, PMI-Canada wishes to establish close working and cooperation arrangements with all project management professional organizations. In particular, PMI-Canada has recently signed Letters of Intent for putting in place Memorandum of Cooperation with the International Project Management Association, Association for Project Management and Project Management Associates India.

The purpose of these Memorandum of Understanding is to ensure that international Project Management documentation, services and products are readily and directly available to PMI-Canada members. Further, that PMI-Canada members are encouraged to participate in international cooperative initiatives and projects.

SUMMARY

Timing is everything. Shakespeare said it: "There is a tide in the affairs of men, which, taken at the flood, leads on to fortune."

The time is now for the globalization of the project management discipline. The ingredients of a global project management standard, global certification program and international project management federation are on the table. The current window of opportunity will not remain open forever. The worldwide project management community must come together into a coherent and useful global force for the social and economic welfare of all.

August 23, 1996

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Note 1: The Canada Country Report 1996 is posted on the Internet and can be read online. A copy can be obtained directly, through Internet File Transfer Program (FTP), from the PMI-Canada Web. The Universal Resource Locator for the PMI-Canada Web is <http://www.pmicanada.org>.

CHILE

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

Project management is a discipline that is rapidly growing in Chile, involving an increasing number of people. Although the discipline existed here for more than 20 years, today there is change of attitude towards being informed and trained formally on the concepts and tools of project management.

What industries or types of projects are the main users of modern **project** management in your country or region today?

The construction and infrastructure industries. Mining, civil engineering and industrial construction projects mainly is also permeating other areas such as banking, information systems and communication industries.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

The same as mentioned in question above.

How can the **project** management profession be most **effectively** advanced in your country?

Having instances of discussion, diffusion, exchange of experiences, and training. A PMI chapter is a good starting point that later can become a Chilean Association of project management. Also the organization of seminars and congress will be very helpful.

What **impact** will globally recognized **project** management standards or certification have on the **project** management profession in your country?

I am not totally sure but I expect that it will increase interest and dedication of this discipline.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The same of current PMBOK but adding an international dimension to it. Maybe a different section addressing the particular characteristics of international projects.

How important will international "Standards" for **project** management be in your country or region? Please comment.

I am not sure. However will help in assuring a consistent level of qualifications.

Is **project** management certification of interest in your country? What type of **project** management certification?

Yes, it seems to be of interest. I would use an international type of certification.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

I support it considering the globalization trend that exists in the world today and I expect it to increase in the future. It should be organized with representatives from everywhere with the same purposes of PMI today plus the introduction of global issues. However we still see PMI as an American Society only. This should be changed.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Using Internet, creating a PM net of interested people. Organizing events around the world (seminar, symposiums, etc.) that get people in touch. Creating multinational research projects with PMI funding if possible or using other sources of financing.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

We are in the process of forming a PMI Chapter. We have organized two meetings of PM interested professionals to present ideas and knowledge. The second one is on November 14 and 15 this year in Santiago, Chile. The number of members at this time is around 40.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes, with the Catholic University of Chile, School of Engineering (the top school in the country). Also with some public companies such as Codelco.

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COLOMBIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

The project management profession was introduced in Colombia by multinational companies, mainly related to the oil industry, more than ten years ago. Today, project management is growing steadily, but not as fast as we would like it.

There are a limited number of universities giving seminars and courses on project management. As a matter of fact, I have been teaching seminars in a local university (Universidad Javeriana de Cali) for five years now to more than 500 students. Also, consultancy in this field is very scarce, and my company is the only consulting company in Colombia with a specific contract to implement project management in a governmental institution. We have been working with the Utilities Company of Cali (EMCALI), telecommunications, energy, water and sewers, and public works, for more than a year in order to implement project management in this company, which is executing projects for about US \$250 million per year. For this job we are using 100 percent, and quite successfully, the PMBOK approach.

What industries or types of **projects** are the main users of modern project management in your country or region today?

The main industries using modern project management are oil refining, pipelines, gas lines and the big chemical companies, especially the ones related to multinational companies.

What industries or areas of application in your country have the greatest need for more or **better** project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

The utilities companies seem to have the greatest need for project management, because this sector, besides growing rapidly, is facing strong competition from the private sector due to the relatively recent privatization campaign initiated by the **government**. Also, the civil works construction companies should take a step in the project management direction since traditionally its approach has been one of only contract management, without consideration for other aspects of the project.

How can the project management profession be most effectively advanced in your country?

The formation of a local PMI chapter to promote project management education and project management application to important projects could be an important step forward.

What impact will globally recognized **project** management standards or certification have on the project management profession in your country?

They could help with the recognition of project management as an effective and safe way to execute projects.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

I think a totally new integrated approach is needed since the excessive taxonomy implied in the actual PMBOK can be misleading to cultures that have a tendency to look at things in a more integrating and global way.

For this reason the following approach, which takes into consideration three big areas, could be a compromise between the two extremes: a fully integrated approach and a fully partitioned one. I am convinced by experience in my country that the following approach helps managers to focus on the main issues of the project and makes it easier for them to develop the required managerial skills.

Resource Management is the art and science of managing effectively all the resources required to execute the project. It includes:

- Human Resources Management—all the efforts needed to have, internally and externally, the required people with the suitable qualifications, working effectively and enthusiastically to reach the project objectives.
- Procurement—to provide in a timely fashion, with the defined quality level, all the equipment, materials, services and labor required to materialize the project.
- Communications—the establishment of the required infrastructure together with the development of appropriate skills to manage effectively all the project-related information, so that the project objectives can be achieved.

Plan Management is the art and science required to ensure the project objectives through analysis and prediction of all project-relevant aspects and monitoring and control of the subsequent plan. To successfully carry out the plan the following functions must be managed:

- Scope Management—the management of the extent or content of the job, which is described by **identifying** and naming all activities which must be executed, all final resulting products and the resources that must be used to execute the projects.
- Time Management—required to predict, organize and maintain the control of all time-related events in order to carry out the project in the span of time assigned to it by the owner.
- Cost Management—the execution of all required processes to maintain the financial control of the project in order to assure the timely availability of the assigned funds required to successfully complete the job.

Performance Management takes care of the project execution and the project itself as a product performs as planned and expected by the owner. It requires the execution of the following functions:

- Quality—this function must be regarded with the dual objective of accomplishing the project execution performance as regarded by the owner and stakeholders and the project fulfilling the established requirements as a product. In the first case, it must be sure that the project is executed according to the scope, time and cost objectives together with participants satisfaction. In the second case, it must take care of fulfilling all quality requirements of the project to operate as expected by the stakeholders.
- Risk Management—the art and science of identifying, analyzing and responding the risk factors that can negatively affect the project execution. Risk can be viewed as contrary to quality, according to the above definitions of both items.

How important will international "standards" for project management be in your country or region? Please comment.

They are essential for **two** reasons: It will help developing countries to improve their performance in project execution and also allow the globalization of a very important profession.

If they are adopted, project managers should be forced to follow them in their professional activities.

Is **project** management certification of interest in your country? What type of **project** management certification?

No response given.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

I think that a unified global project management association will be a giant step toward the development of the project management profession and through it, we can improve the welfare and development of all nations.

The organization must be a neutral one, i.e. not dominated by any country in particular, and it should consist of both membership of local organizations as well as individuals willing to help the project management profession advance. More than anything it should be the center of communications between the professionals of all the world and the entity in care of maintaining a homogeneous development of the project management profession.

How can project management associations around the world better communicate and cooperate to advance the **project** management profession?

I think there are two main channels to be maintained simultaneously: A global newspaper dedicated mainly to news and local issues that can be of interest to the international project management community, and the participation of all the associations around the world via the Internet.

YOUR ORGANIZATION

Briefly describe the **history**, purpose, organization and activities of the professional **project** management organization you represent.

A project management organization does not exist in Colombia. A few years ago I tried to promote one, but met with difficulties: I could **only** raise the amount of project management members from 4 to 17, and they were scattered all over the country.

For countries where the project management profession is not established, it could be helpful to allow national associations with members living in different cities until there is enough people to have a local association.

Does your organization have established relations with agencies or departments of your government, or with universities?

Not applicable.

CZECH REPUBLIC

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The project management profession is slowly **trying** to find its place among other professions. Generally, we can say that the recognition is still not here but there is a demand from the companies and clients for this profession although this is not so clearly defined. We can say that the need is generally growing and this fact itself gives good opportunity for different efforts and enthusiasm among which our project management society firmly belongs. We can say that we are at the dawn of the process.

What industries or types of projects are the main users of modern project management in your country or region today?

We can say that, in the less defined way, all industries are using some parts of the project management practice. Probably our industry would never build airplanes and nuclear power plants without project management practice. So our industries are using project management without recognizing it as a special expertise and thus not using all the benefits which project management can bring.

We can say that from 60 to 80 percent of processes from good project management practice is being used. Unfortunately remaining 20 to 40 percent, which use to be the most effective, is not used. We can nonetheless declare that the construction industry and machinery production industry are main users of modern project management.

What industries or areas of application in your region have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

All newly privatized companies — around 2,300 — and large government-owned companies are in the biggest need. We should mention also that all government institutions and authorities are also in need.

The construction and machinery industries are in favor of project management growth and development in the first instance. There is no special institute for education and training, but there are from five to 10 companies which tend to focus on project management. Universities are the basic place for project management education. Still we can say that education opportunities are very scarce. Inevitably, we face in the near future the establishment of several project management institutes or project management schools.

How can the project management profession be most effectively advanced in your country?

There is and should be the following supporting piers of project management development in our country:

- Managers and owners working together
- Professional platform — Project Management Society (SPPR)
- Project management as a natural part of education in the secondary schools and university level schools.

What impact will globally recognized project management standards or certification have on the project management profession in your region?

Certainly very strong. Particularly, education processes in our schools tend to be influenced by globally recognized expertise. It is always much easier for everyone to use models and standards already developed.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

The key part should be dedicated to terms of reference, definitions and descriptions of generally accepted project management practices. In other parts, there should be a systematic overview of project management methods, tools, techniques and ways of application. Case studies, checklists and general examples of documentation could also be included. Legal matters, rules and regulations should be reflected. Multimedia appears to be appropriate technology for storing and spreading the information. Main from country to country specifics could be mentioned. Literature and long existing education institutions should be mentioned.

How important will international "Standards" for project management be in your country or region? Please comment.

International standards for project management could be very well the engine and catalyst not only for the broad, business-oriented population, but also for schools. As it was mentioned in our last report, our country is too small to finalize similar standardization in the near future on its own and thus international standards will contribute to speeding up the process.

Education and training might come from international standards of project management and form a firm foundation on which we can see differences and build our own specific future.

Is project management certification of interest in your region? What type of project management certification?

Although certification of project management will not solve the problem of implementation, we feel that the existence of an accredited body and the existence of certified project managers will dearly support our interest and will generally speed up the process of full recognition of this profession. Through certification we can also create a real market for project managers. Certification is needed in our country, but we should not exaggerate its effect. As it has been already indicated, project management for construction and machinery production are of prime importance nowadays.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Such an organization should be created preferably on an information basis and should be very flexible. With a minimum of bureaucratic background, it should be able to exchange information where needed and to promote development. The foundation stones should be well organized national societies where the real life goes. Apart from information and an international standard building process, we would like to stress the support of education and the production of a publication.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Although we have Internet, fax, telephone and mail, which we certainly use, the best and most effective way of communication is direct contact and shared information. To support this relatively expensive way of communication, we should look for ways to earn money.

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Communication must not always be direct so that we can use student exchange, exchange of project managers among companies and exchange of government employees. We can set up a database of those experts who would volunteer to support processes in less developed countries.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Project Management Society (Společenost pro projektové řízení) was established in 1990. The Society was created from Internet National Committee that was established in the spring of 1989 as a part of the Czech Society for Science and Technology. However, a Czech specialist as an individual used to collaborate with Internet since it was established in 1967.

Currently SPPR has 100 individual and eight corporate members. Most of the active members are academically oriented teachers. SPPR organizes from three to six seminars a year. In September 1995; the regional congress on project management took place in Jindřichův Hradec and has been well received. One of the most important seminars was organized on June 12, 1996, in Nejdk with 33 participants. SPPR has presented Nejdký Programme of Professional Partnership which is internationally oriented and should strengthen the Czech professional position in Europe the above mentioned program deals with certification of the project management profession under the standard of IPMA. Currently SPPR focuses on:

- Professional contacts
- Building project management know-how fund, PMBOK
- Fostering project management understanding and recognition
- Certification and accreditation

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

SPPR has a very close relationship with universities since 25 percent of the members are university teachers and students. There is not now a working contact with the government. There is growing contact with private companies, indicating locations of the need.

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ECUADOR

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

The project management profession is not recognized as such at this moment in Ecuador. During the past two decades, multinational companies have used project management professionals from abroad, or living locally, and have brought with them tools that we had been using intuitively. The construction industry, especially for large projects, is influenced by project management concepts.

Our inquires indicated that there is no formal training in project management offered by a recognized institute in Ecuador.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

The main industries using project management are oil refining, pipelines, construction and consulting firms.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

The utilities companies seem to have the greatest need for project management. Some of the companies in this sector, besides growing rapidly, are going through changes due to a privatization effort on the part of the **government**. Those that will remain as public companies will require project management in order to improve the quality of their services. The construction industry offers a great opportunity of growth in project management.

How can the **project** management profession be most effectively advanced in your country?

The first and most important step should be to create a local PMI chapter that would promote project management education and applications to important projects in different areas.

What **impact** will **globally** recognized **project** management standards or certification have on the **project** management profession in your country?

Globally recognized project management standards will somehow be a concern for global corporations. Certification and standards would definitely add value to any project management proposal. However, this is limited to impact a relatively small group of people, and the general acceptance of the merits of project management is yet to be developed. Still, there are many people interested in it.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

A global PMBOK must contain the essence of project management knowledge and experience. It should explain how projects must be managed, and it should contain information about project process management, procurement process management, quality process management and design process management. The PMBOK should also address interpersonal skills required to organize and lead a project team. Cultural approaches need to be considered in some format.

How important will international "Standards" for **project** management be in your country or region? Please comment.

International standards are becoming an important factor for industries in which products are competing globally. International standards should reflect the needs of the project management profession. There are a number of companies in Ecuador that are going through the ISO 9000 certification process.

Is **project** management certification of interest in your country? What type of **project** management certification?

With the globalization process that Latin American economies have been going through during the past few years, there is a growing interest of Ecuadorian industries in obtaining some type of certification in their processes. With the help of a local PMI chapter, the interest for project management certification and its importance could be developed, therefore opening wider opportunities for project management professionals.

What is your interest or position on a unified **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

We are interested in spreading the concept of project management through a unified project management association. We feel that our country needs to formalize the training of project management professionals. We need to promote the acceptance of project management as a discipline and a profession. We would welcome your suggestions on how we should organize our local chapter.

How can **project** management associations around the world better communicate and cooperate to advance the **project** management profession?

No response.

YOUR ORGANIZATION

Briefly, describe the history, purpose, organization and **activities** of the professional **project** management organization you represent.

We do not have a project management organization in Ecuador, but we need to create one.

Does **your** organization have established relations with agencies or departments of your government, or with universities? Please describe.

No response.

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EGYPT

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (**i.e.**, newly introduced, growing, mature?)

The project management profession is growing in Egypt. It started in the late '70s but is limited in its applications to "hard" project **engineering-procurement-installation**.

What industries or types of projects are the main users of modern **project** management in your country or region today?

Its main users in Egypt are the petroleum-related industries, followed by the electricity sector, large water and waste water projects, infrastructure, civil and industrial projects.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

All industries are in need of better project management.

How can the **project** management profession be most effectively advanced in your country?

Project management can only be effectively advanced when accountability is applied to the project manager.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

It will enhance the profession.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

This will need a separate and detailed response.

How important will international "Standards" be for **project** management in your country or region? Please comment.

Each project is unique and each manager is unique, each contract, each owner or owner's representative ... are unique, so we need "unique standards."

Is project management certification of interest in your country? What type of project management certification?

Certification is important and of interest.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

We need a global project management association with a strong technical alliance and weak interference in regional turfs. Let's not step on toes. Its objectives should be:

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- Further development of the PMBOK (the PMI BOK, APM, GPM, IPMA, and any other regional BOKs)
- Balancing project manager Responsibility, Authority, and **Accountability**—**RAA** (the God of Gods in ancient Egypt)
- Project management contracts language—standard formats with different options: **i.e.**, between client and project management **firm** or project manager; between project management firm and project manager
- **Certification**
- Standards (unique—maybe "guidelines" is more appropriate)
- Ensuring projects meet stakeholders' needs
- Project audit guidelines
- Project evaluation guidelines at **go/no-go** decision points and at completion.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

As soon as the objectives are agreed upon in the global meetings held at PMI, IPMA, and elsewhere, cooperation and communication can be worked out.

YOUR ORGANIZATION

Briefly describe the history, purpose organization and activities of the professional project management organization you represent.

Omar Seif Elding & Sons is a private consulting firm, and is not the project management association in Egypt.

FINLAND

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage **is** the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

The project management profession is in a growing stage. Several development programs and research projects are being initiated, and also demand and supply of training and education in the field are increasing. In universities the area and needs of the industry in the project management area are recognized as well, **e.g.**, an associate professorship for international project-oriented business is established in Helsinki University of Technology. Also, other universities are active in the project management field.

What industries or types of projects are the main users of modern **project** management in your country or region today?

Construction, metal and engineering industries are main project management users with application of project management methodology to not only traditional construction, but also to plant investments and deliveries. Besides power plant and power transmission delivery related project deliveries, paper mill and paper industry related engineering projects are major users of modern project management. Environmental technology related projects are a growing field, as well as projects in new, growing industries such as telecommunications business.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Environmental technology related projects are a growing field, as well as projects in new growing industries such as telecommunications business.

How can the **project** management profession be most effectively advanced in your country?

See description of PMA Finland's current activities and plans for future activities in the following.

What **impact** will globally recognized **project** management standards or certification have on the project management profession in your country?

International project business is important for Finland's industry in the future. Thus, adopting global and international project management working methods is considered important. Understanding of international standards and certifying project managers to match international certification standards is promoted.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The certification and PMBOK is being developed (see in the following). Global, international and multicultural issues are of importance.

How important will international "Standards" for project management be in your country or region? Please comment.

See above.

Is project management certification of interest in your country? What type of project management certification?

PMA Finland has formed the basic project organizational structure for project management certification development, and a development project for project management certification program is being executed with an aim to get certification procedures established by the summer of 1997.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

PMA Finland is interested in cooperating with several international project management associations and providing services for several international associations for its members and stakeholders. The project management profession and also new global project management methodologies will be promoted in Finland in the industry and in the university field by using contacts with international project management associations.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

See description of PMA Finland's current activities and plans for future activities in the following.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

PMA Finland has approximately 250 individual members and 15 corporate members. The number of individual members has remained stable, whereas the number of corporate members has increased by five during the last year's time.

PMA Finland's aim is to promote professional activities in the field of project management by initiating research projects and state-of-the-art programs.

On a yearly basis, four issues of the journal appear. One of the issues is an international (English language) version. The distribution of the international issue is almost 4,000 copies, the most of which are distributed via PMA Finland's contacts worldwide.

PMA Finland arranges one major national one-day seminar on a yearly basis. In 1996, the concept of the seminar was based on two different streams, attracting about 60 participants.

Educational activities of the association are arranged by the Project Institute Ltd. There are about 10 one- or two-day training seminars annually. Basic project management courses are arranged also in English, German and Russian. In addition, tailored education packages are offered to client companies by the Project Institute.

An ongoing research project is "Preplanner," a research project for pre-project planning and project initiation development. There will also be future research activities. For example, a research program in the field of investigating project management and its implications in Finnish project export is in the developmental stage.

PMA Finland's major international stakeholders are in IPMA (International Project Management Association), PMI (Project Management Institute), ICEC (International Cost Engineering Council) and NORDNET for Scandinavian cooperation.

As progress was made in promoting project management, a new supervisory board was established about the same time as the new PMA Finland board was formed for 1996. The supervisory

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board will consists of influential individuals in the field of project management, and its function is to assist in the strategic planning of the association as well as to support in its external relations. In the beginning, primarily top management of the member corporations will be invited to the supervisory board.

PMA Finland board members all have specific responsibility areas. Board responsibility areas comprise:

- International activities and cooperation
- Strategic planning
- Education and training
- Stakeholder relations
- Public relations
- Economic affairs
- Research and projects
- Year's project competition.

In summary, the basic areas for promoting PMA Finland and overall project management field are:

- International activities and relations
- Research program
- Public and stakeholder relations in Finland
- Education and training.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

The Finnish ministry of education is supporting the planning of certification, and there are also several Finnish companies financing the certification development programme.

A forthcoming research program will be in the field of investigating project management and its implications in Finnish project export. This new project is in the developmental stage; negotiations about the project content are being held with Finnish construction and metal industry representatives as well as the Finnish ministry of trade and commerce.

In general, PMA has also close relationships and cooperation with several industries, universities and research institutes in Finland.

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FRANCE

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

The project management profession in France is mature. Beyond the traditional industries where project management has long been the rule (*e.g.*, *Bouygues* for building construction, *Aerospatiale* for aeronautics), new fields of the industry have turned to project management (*e.g.*, *Renault* and *PSA* for car industry, *Matra* for telecommunication). The influence of American companies is big, since they have brought their own methodology to France through their French subsidiaries.

In parallel, project management associations are created (*AFITEP*, *PMI*, *Chapitre Francais*, *IGP*).

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

Most industries use project management:

- Iron and steel industry
- Oil, gas, nuclear engineering
- Space, aeronautical industry
- Car industry
- Shipbuilding industry
- Military industry
- Pharmaceutical industry
- Electronic and telecommunication
- Manufacturing industries
- Banking and insurance
- Services.

The different type of projects are:

- R&D
- Product design and manufacturing
- Product marketing
- Development
- Reengineering
- Roll-out.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of the **project** management professional in your **country**? Why?

As a rule, project managers use a homemade methodology and lack a standard they can rely on. Thus, all industries need a better project management in terms of a standard methodology. However, the greatest opportunities lie in the public sector, which employs about 15 percent of the active population. Indeed, if the public companies use a precise project management standard, it will force their subcontractors to work with the same standard. Furthermore, it will have a large influence on the determination of local certification.

How can the project management profession be most effectively advanced in your country?

First, universities must be involved in teaching project management. They will have the ability to deliver project management certificates, making the profession recognized.

Individual certification is not enough to make the project management profession evolve toward a plain recognition. Company certification is a step toward this goal. This certification would act much like the ISO 9000 certifications for quality (big companies require it, and subcontractors must become certified and train project managers; it is a snowball effect).

What impact will globally recognized project management standards or certification have on the project management profession in your country?

An ISO-like certification for companies would ease international cooperation, since certified companies would work with the same procedures and talk the same language. Such a certification would make the borders easier to cross, which is very important in the EEC. The risk of such a certification is that the procedures involved do not fit the PMBOK, jeopardizing the future of PMI. As a consequence, PMI must collaborate in the building of such a certification and make sure that the procedures fit the PMBOK.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

A Project Management Body of Knowledge should contain references to books that set up the common background for all the project managers. The basic references should be completed by appendix for each region or area and for each field of activity.

How important will international "Standards" for project management be in your country or region? Please comment.

Thanks to EEC regulation, an increasing number of projects involve different European countries, people with different cultures and ways to work. It is important to have an international standard for project management so that project managers have a common background and work with the same rules. A standard for project management would give a basic criterion of evaluation for both French and American project managers. Project management from different countries can be judged and compared in relation to this standard and offered the same career evolution.

Is project management certification of interest in your country? What type of project management certification?

It is not always easy to find the right project manager in France, since the name does not have a precise meaning. For instance, when recruiting a project manager, only five percent of the candidates match the job profile. A certification would be a guarantee of professionalism for the employer. AFITEP has set up a certification program (CMP: Certificate in Project Management) recognized by the ICEC.

IGP, whose goal is to establish relations between industry and universities in the field of project management, has set up a masters of project management, and is willing to prepare the students for both CMP and project management certifications.

A PMI certification is more and more attractive for the French project managers who consider it valuable internationally.

A project management certification should be internationally recognized. The criteria to be qualified for certification should be the one commonly used (educational background, professional background and activity in the project management organization). Nevertheless, the qualification criteria must be defined in a way to avoid selecting just an elite of academicians. Therefore, the local chapters should be

able to match these criteria with the specifications of their geography. This is particularly important for the new chapters whose goal is to attract, and not discourage, the would-be members.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

A unified association would mean a single point of view and a single methodology. Evolution comes from the confrontation of different points of view. Finally, a unified association is not favored by PMI Chapitre Francais.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

In terms of tools, project management organizations could communicate through the Internet (Web pages, newsgroups and e-mail) and Symposium.

Through the internationalization program of PMI, the relationships between IPMA and PMA in Europe could be improved thanks to a permanent contact by creating a European PMI structure. Such a structure, representing the European chapters, would contribute to the recognition of project management status in Europe.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

PMI Chapitre Francais was created in October 1995. After a year of existence, the chapter regroups more than 60 members.

The organization has three goals:

- Give French project managers, working in American companies, the opportunity to have the same career perspectives as their American counterparts.
- Promote the project manager status in France.
- Provide an international project management methodology, so that French project managers can work with the same methodology as their American or European counterparts and have a common background.

The organization involves a president, a secretary, a treasurer, a public relations manager, a training manager and a program manager.

Our activities include:

- General assembly meeting in November 95
- WWPM Congress, June 96, with a stand and a social event with PMI members (30 participants)
- Sponsoring the Leadership Conference organized by ABT on September 96
- Promoting PMI certification in working sessions with large French companies and universities
- Conference with dinner, April 96
- Ongoing study of qualification criteria certification.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

PMI Chapitre Francais has established relations with:

- Leonard de Vinci University, where project management courses to prepare the PMI examination are delivered.
- IGP (Institut de Gestion des Projects). PMI Chapitre Francais is a member of the support committee. IGP is interested in being able to prepare project management certification.

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GERMANY

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management in Germany can be tracked back about some 40 years. Today, project management practices can be found in virtually all business and government sectors. Project management is an accepted and well known discipline. It has reached the whole range of different levels on the scale between maturity (e.g., civil engineering, aerospace, defense) and infancy. The idea of "management by projects" has become more and more popular in industry and economy in general as well as in the public sector.

What industries or type of projects are the main users of modern project management in your country or region today?

Well, it certainly depends. Accepting three major types of projects there are different project management application rates in the row of their frequency in R&D, investment and organizational projects in Germany. A rank-like listing of industries or certain branches seems not useful as this collection would always be of subjective character.

With the increased recognition and promotion of a real profession, modern project management concepts are quickly expanding into all other sectors and branches, too. There is a continued exchange of experience between all fields of users.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of the project management professional in your country? Why?

In general all sectors can still benefit from improved and professionalized project management. The project management profession is well accepted and practiced in civil and industrial engineering, pharmaceutical R&D, urban projects, housing, and ship-building industry. The introduction/practice is in progress in public sector as well as in small and medium-sized companies.

How can the project management profession be most effectively advanced in your country?

A major experience in recent times is the growing importance of "organizational" projects in all types of industry and in governmental and other organizations. This results in weakening the term and content of a "project" and it appears that at least a partial redefinition of content and implications with our project management instruments and philosophy will be needed.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

It is very important that any "standard" is meaningful and at a truly mature professional level. Then there may be a positive impact. On the other hand, if the standard seems to be trivial or simply not practicable in the eyes of project management users, there will be a very negative impact. By consequence, global project management standards and certification need to consider national/cultural/industry specific adaptation under one common project management understanding.

Global project management standards and certification are in the ideal way extremely helpful for project personnel in international projects. They enable comparison of skills, avoid misunderstandings and ease cross-cultural sensitivity. In Germany, people seek standardization, neutral assessment and decision support in many fields of work, not only in project work.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

Of course, there are some "must have" and some "nice-to-have" aspects. But which are they? Regarding the very different circumstances in countries and in homogeneous cultural general settings, it seems to be a rather high approach discussing the global PMBOK. So, any work on these future documents has to care about this "problem." An extensive discussion about contents and significance of single elements of **knowledge/experience** has to be done within real international-minded working groups. Nevertheless, it is unequivocal that the definition given by ISO and nationally standards like DIN, BSI etc., have to be considered.

How important will international "Standards" for project management be in your country or region? Please comment.

Within the mere national German project management context, global standards would have little impact. The value of "global" standards will be for individuals or companies who are active in the international arena and also for multinational organizations. These standards should reflect the needs of the profession. Of course, there will be an important support for any international certification program. In any case, those international standards have to be compatible to the existing national standards.

Is project management certification of interest in your country? What type of project management certification?

GPM runs its own very successful certification program for project management personnel. This program, which is in accordance with the IPMA rules, was launched in 1995 with four rounds of candidates completed up till now. It is increasingly well accepted in Germany. For qualified administration and further promotion, a separate GPM certification body ("PM-Zert") was set up in December 1995. Furthermore, the German certification Program will be enhanced to project management organizations, project management products and project management services.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

GPM understands the vision of a closer global union in questions of project management. This is not unimportant for successful communication and effective cooperation in the permanent growing number of international and multicultural projects all over the world.

In principal, GPM agrees on and supports the idea of unified global project management understanding and global cooperation. But as a primarily national association, it does not promote a centralized global project management organizational body. The existing national associations are responsible for their own activities and tasks. This should be organized decentrally and coordinated bilaterally.

Those countries which have already established a professional project management association can or do assist their neighbors in setting up a new member in the international "PM family" in a tutorial way. GPM favors the idea of an international link between all interested national project management associations.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

The international organizations (IPMA, PMI, AIPM, etc.) are to continue with international working groups for project management products and services. The Project Management Global Forum should be held at least once a year to enable communication and cooperation between the national representatives.

According to the experience we have gained within the last years, the creation of an international network as an "umbrella" association offers a good platform to support and formalize relations and maintain regular communications and cooperation (e.g., IPMA or ICEC are successful examples).

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

GPM (Deutsche Gesellschaft für Projektmanagement, V.) is the German member of IPMA (International Project Management Association). It is the leading professional organization for project management in Germany. According to its by-laws, GPM intends to spread and to develop project management **interdisciplinary** in Germany. GPM was founded in 1979 as one of the first national associations of IPMA International Project Management Association. GPM now has more than 1,200 members as individuals, companies or organizations. GPM is open to everyone and the services and program are not restricted only to the membership.

ORGANIZATION

GPM is headed by a board consisting of eight volunteer board members elected for a period of four years. The board is supported by a secretariate as head office. GPM runs its own certification program which is administered by a separate certification body ("**PM-Zert**"). This follows the intention that the **qualifying** body (GPM with seminars and training courses) and the certifying body (PM-Zert with certification procedures and assessors) should be separated to guarantee an impartial process.

MEMBERSHIP PUBLICATIONS

Projektmanagement-Zeitschrift (Project Management *Journal*) with scientific and practical contributions quarterly consisting of about 48 pages. It is published in cooperation with the Swiss and Austrian Project Management Associations and covers the whole German speaking area of central Europe.

GPM-aktuell for internal information of the association, published quarterly with up to 24 pages.

PM-Telegramm shows the latest information "flash" on seminars and other national and international events and further news around project management. Not only for GPM members, but for all people interested in project management. Only four pages and easy to read. Additional information required according to the interests of the reader can be ordered by fax (polling) or order form.

ELECTRONIC COMMUNICATION

We are in the process of completely redesigning our secretarial services and introducing electronic communication at a much higher level including e-mail (e-mail address: gpm-ipma@t-online.de) and an Internet home page as well as automatic booking for GPM services. Our complete database of about 8,500 addresses is being restructured. Further, the work of our 17 SIGs shall be strongly supported in the near future by means of electronic conferences and joint editing. This project shall be finished by the end of 1996.

CONFERENCES AND SEMINARS

The national PM-conference (PM-Forum) is organized every year with some 350 to 500 participants. The 1996 conference took place in the buildings of an old coal mine in the middle of the Ruhr area, a region with very strong industrial, economical and social changes which gave the headline "Structural changes with P M for this conference.

Experience, Cooperation and the Future

In the last year, GPM organized some 45 seminars (one to three days) with a broad variety of topics ranging from traditional basic introduction and project management tools to intercultural management in projects, negotiating and contracting up to project management for small and medium-sized projects.

Our regional groups (chapters) are becoming more and more active and are organizing events with up to 200 participants with various topics. This development to decentralized activities is strongly supported by the board.

EDUCATION AND TRAINING PROGRAMS

The German education and training program "*Projektmanagement-Fachmann*" (PM-Expert) was developed by GPM five years ago and has some 400 graduates today. It is based on a two-volume book with about 1,200 pages, 450 figures and takes about 150 hours. Especially for this course, GPM qualified and licensed a restricted number of 22 highly experienced trainers to ensure the high level of this course. Based on five years experience, a project was started for the general new development of the course in order to make this product fit for the next century. This project is co-financed with measures of the German Ministry for Economy.

A new qualification program for commercial project managers focusing on international inventory projects with high technological and administrative/legal/contractual complexity was launched very successfully last year. Graduates receive a certificate from a German university with which GPM has a long-time cooperation. Both courses are to be finished with a half-day written examination.

FUTURE GOALS

Strategies for further development of project management in Germany focus on stabilization and further growth of present services, more intensive market communication, as well as developing new products where GPM shall again be the trend setter and present itself to the broad public as the leading project management organization in Germany. Internally, we are striving for more active contribution from our members in order to meet the still growing and changing challenges of the project management market and life in Germany.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

GPM has permanent liaisons in the form of cooperation agreements with several other non-profit organizations in Germany for mutual benefit (e.g., with VDI Verein Deutscher Ingenieure e. V., the overall German Engineer's Association with more than 150,000 members). Furthermore, there are many project-wise cooperations with member companies (for specific conferences) or members (e.g., as directors of Competence Centers where GPM concentrates all activities for a certain industry like pharmaceuticals). Some efforts have also been put into direct cooperation with other national associations.

In most of the running and planned projects, representatives of universities are members of the team. The exchange of latest results in research and development between theoretical and applied project management is stressed.

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GREECE

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management in Greece is a relatively new profession, but as a concept it has been well known in our country for quite some time. Nevertheless, we have recently observed a great interest towards project management. This growing interest in project management has, at least in part, resulted from the fact that the European commission is currently requiring it for the supervision (according to established project management techniques) of all major Support Framework (Delar's II) financed projects. Due to the fact that these specific contracts allot considerable budgets for project management (1,500,000 ECU – 15,000,000 ECU) and, since there is a lack of similar experience in Greece, these projects are likely to be assigned to large companies from the USA, England, Germany, France, etc. Nevertheless, Greek companies and professionals will be included in the consortiums undertaking such projects and will therefore gain further practical experience. Given these activities, there will be a boost in the Greek project management field.

What industries or types of projects are the main users of modern project management in your country or region today?

Project management activities in Greece are expected to mainly involve large technical project such as:

- Motorways
- Railways
- Airways
- Ports
- Gas pipelines, etc.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

In the industrial sector, project management techniques/methodologies are rarely practiced in Greece. Nevertheless, I believe that the expected large increase in the number of technical projects will influence project management's development in this sector.

How can the project management profession be most effectively advanced in your country?

To date, interest in project management has been almost exclusively limited to the training of engineers. I believe that the training in project management techniques will contribute to the improvement of the project management profession, and that this training should occur in two areas:

1. Through the universities, as a specialization or as a post-graduate degree
2. At a professional level, as specialized seminars for the training of professionals who undertake projects and who wish to improve their knowledge of project management.

What **impact** will globally recognized **project** management standards or certification have on the project management profession in your country?

"Global Standards" are necessary in all sectors, and of course project management is no exception. As a small country, without significant industrial development, Greece has suffered from the lack of standardization. However, the fact that Greeks are acutely aware of this problem suggests that steps will be taken toward achieving international standards for project management. In any case, now that the economy is internationalized, the internationalization of standards is crucial.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

No comments.

How important will international "Standards" for project management be in your country or region? Please comment.

See "What impact will globally recognized ..." above.

Is **project** management certification of interest in your country? What type of **project** management certification?

Project management certification is of great interest for our country. I believe that this certification should take place at both the individual level as well as at the company level, according to ISO 9000.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

A unified global project management association could enhance the rapid transfer of information concerning new developments and methodologies, as well as promote reasonable standards for project management professionals/ companies.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Based on the fact that our association is very young and has limited experience, concerning matters such as the organization and communication of project management associations, I prefer to leave these remarks to other European colleagues who benefit from more experience.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

The HPMI was founded in 1992 in response to the need for an institutional framework that would embrace the advancement of project management in Greece. It operates as a resource pool and provides a platform from which to exchange experiences and discuss problems as well as a locus for members to **keep** abreast of new systems and international developments affecting project management applications, trends and methodologies.

The HPMI is a non-profit and independent **professional** organization committed to representing the professional interests of its members and enhancing technical standards.

The HPMI provides the following activities and services:

- Information services, including regular newsletters giving updates on the field
- Specialist journals, which are circulated to the members

Experience, Cooperation and the Future

- Seminar proceedings, books and publications available to members at a discount
- Computerized databank of project management literature and events
- Annual directory of members, listing individuals and companies active in project management
- International Project Management Association Membership.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

HPMI operates mainly on a network basis, with access to several organizations, professionals and academics in several European and Third World countries. Although relations with government bodies and universities are mainly of an informal nature, HPMI counts on close relations/support of several Greek universities and public institutes.

HUNGARY

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Unfortunately, dramatic changes happened in our membership. In connection with the economic situation, many experts and project managers left their previous positions and ended their membership in our association. Now we have a membership of only 30 members, but we hope that after a short period they will return. Our chairman, Mr. David — due to his position in the Hungarian Olympic Committee — resigned. The new chairman, Mr. Imre Vegh, is president and general manager of KIPSZER Ltd. Company.

During the reporting time our efforts were concentrated on the following activities:

- Exchange of experiences in project **management/membership** — conventions, description of new methods, personnel contacts among the membership, etc.
- In connection with the **transformation** of the Hungarian economy, to defend the interests of Project Managers
- To strengthen the connections with similar associations both nationally and internationally
- Promote activities for new members. Close cooperation with various universities and high schools to influence the students to gain membership in the association.

NATIONAL SEMINARS

On an average, three times a year we organize national seminars to offer an opportunity for the membership to be informed about new methods in project management. On these occasions, the membership gets information about the activity of IPMA. At the same time there is always information about the future events of IPMA.

Especially successful was our seminar dealing with the public tenders. Many remarks of the attendees were later included in the final test of the regulation. The attendance of the national seminars is rather high. In May appr. 70 percent of the members were present.

MEMBERSHIP JOURNAL

Unfortunately, we do not have any. Two to three times a year we compose a so called "information letter" which contains the most important facts and information on the activity of the association. Now we are cooperating with the Hungarian ICEC, whose journal is at our disposal. In the last issue, there was a short article on the Paris World Congress. As to our agreement, we will publicize articles dealing with the problems of project management.

FUTURE PLANS

We continued a very close cooperation with Cost Engineering Association (Hungary), participating in each others activities, preserving the independency of the two organizations. Both the organizations represented at the relevant Board Meetings and we organize joint membership events as well. Just like our previous report, we concentrate on enterprise-seminars, which are very popular. During the discussions many problems have emerged which offer for Board possibilities to deal with.

We are now planning a campaign in order to increase our membership.

It will be a great challenge for us to participate in the preparation of joining to the EU. Our association already is invited by the government to be a member of the harmonization committee. Big headache: the financial situation. We do hope that during our next meeting in Paris, we will find a positive solution.

EDUCATION PROGRAMS

We have a close cooperation with the Hungarian universities and high schools. Our members are actively participating in the educational and vocational programs, speaking continuously about the methods and ways of project management. Recently, we composed a small working group dealing with the certification program of IPMA.

We also try to make connections with various foreign universities in order to utilize their experience.

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INDIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

India is a mixed economy, almost equally balanced between government and privately owned enterprises. It is dominated by an agricultural economy in co-existence with industrial and information technology age economies. India is currently undergoing a massive transformation phase to integrate with the global economy. The economic reforms in India are irreversible.

The project management profession in India exhibits a highly varied picture. Whereas large projects adopt sophisticated project management methodology, medium projects are simple planning techniques. The project management profession is at a growing stage, displaying a tremendous potential for growth.

What industries or type of projects are the main users of modern project management in your country or region today?

Project Management Associates (PMA) supports the views of the Center for Excellence in Project Management in dividing projects into "hard" and "soft" sectors. While hard projects relate to organizational or cultural change, human network aspects and total quality management techniques are now being used. The importance of using project management techniques is being realized for soft projects related to education, health and poverty alleviation programs.

Project management techniques are used in all internationally funded projects financed by The World Bank, Asian Development Bank, etc.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Almost across all sectors in both hard and soft projects. Infrastructure construction projects covering transportation, utility, telecommunication and housing will be the greatest beneficiaries.

How can the project management profession be most effectively advanced in your country?

The following nine steps are suggested.

- Follow life cycle phases to project management.
- Put greater emphasis on project planning and conceptualization.
- Do a "What if" analysis for various combinations of scenarios. This would reduce unexpected outcomes during the execution phase.
- Empower people to get out of grooves, explore new things, bestow faith and trust in colleagues, see "whole" and not "parts," be proactive in change management and provide a larger meaning to one's life.
- Establish sustainable values and attitudes.
- Understand in clear terms the immense potential of motivating individuals and teams for higher productivity, lower conflicts and more focus on customers at all times.
- Establish certificate programs leading to the award of a project management diploma/certificate.

Experience, Cooperation and the Future

- Strengthen national project management associations.
- Take no short cuts. Quality should become the hallmark of our actions.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

A great deal.

In today's borderless world, the integration of diversified cultures and different economic positioning is forcing companies to increasingly use project management techniques to maintain a lead in the marketplace. While we adopt and fine-tune to global experience and standards in project management, it is imperative that some modifications be made to suit specific requirements.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

PMBOK should be specifically divided into two major parts, i.e., technical and behavioral planes. While the contents of the technical PMBOK may be applicable across nations and regions, there may be some variations in the behavioral plane.

In the technical plane, we can include topics covering time management, scope management, contract management, cost management, risk management, quality management, planning and control mechanisms, information technology and office automation.

In the behavioral plane, we could provide coverage of conflict resolution mechanism, communication, team building processes, role of leadership, philosophy of sustainability, customer orientation and human network management.

How important will international "Standards" for project management be in your country or region? Please comment.

Standards are welcome to the extent that they should not stifle innovation and creativity. A proper balance is to be struck between standards and flexibility. This balance, in our opinion, would be a critical element in the success of global standards. Flexibility must be built by providing user-friendly entry and exit points from various standards.

Is project management certification of interest in your country? What type of project management certification?

Yes. Because the project management discipline is in the growth stage, a certification program is desirable to provide continuing updating of skills to practicing project managers. In developing countries, a certification program will be more relevant because it will help in catching up with the rest of the world. It will also provide easy operability to transnational corporations when expanding their operations in developing economies.

What is your interest or position on a unified global project management association of organization? If you support such an organization, how should it be organized and for what objectives?

We see merit in the unification of global project management associations. The world is becoming more integrated and, thanks to technology, economic compulsions and the opening up of people's desire to seek more meaning to their lives, there is a tremendous scope to unifying efforts of national project management associations.

We are perhaps the first generation of global citizens and it is in this light that we have to address the question of unification or project management associations. Speeding up this unification process of project management associations will provide a better integration among countries and companies. This would facilitate managing change effectively.

Experience, Cooperation and the Future

Project management is a way of thinking. It is a way of working, irrespective of the type of work. Extensive experience sharing will become an important aspect in moving into the 21st century. Global project management associations can provide an effective platform for experience sharing.

In terms of organizational structure for a global project management association, we see a danger of it becoming bureaucratic. An innovative approach to organization structure for such a global body is a must. It should have an apex body of elected representatives, with different fields of specialization and with regional operations divided into three major regions, i.e., North and South America, Europe and Asia-Pacific. A global project management association should be organized on the sound principles of business followed by international companies.

A responsive organization structure enabling speedy communication should be the basis of its creation.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Project management associations should cooperate to advance the project management profession through better inter-connectivity to ensure better response time amongst the various project management associations. Some of the suggested steps are:

- Be connected through e-mail
- Meet on a regular basis, say once every six months
- Share experiences and research work in the area of project management
- Have a regular publication highlighting case studies
- Create a publication center reflecting viewpoints of national associations
- Allow publication of articles across the journals and magazines of various associations, with due acknowledgment.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Project Management Associates (PMA) is a registered non-profit society dedicated to the cause of spreading project management principles. It has supported the definition of Center for Excellence in Project Management in defining project management where "project" means mission and "management" means efficient and effective accomplishment.

It is a three year old organization and the only registered body representing the interests of project management professionals in India. Adesh Jain is the honorary President and the Executive Committee of PMA is comprised of stalwarts from industries, government and academia. In 1995 PMA conferred for the first time, eight Honorary Fellowships to distinguished persons who have contributed a great deal in the field of project management. They were: Dr. Abid Hussain (India), Dr. D. V. Kapur (India), Dr. Peter Morris (UK), Jean Louis G. Muller (France), Klaus Pannenbacker (Germany), Mantosh Sondhi (India) S. Rajgopal (India) and Prof. V. Voropajev (Russia).

PMA conducted numerous workshops in various parts of India and has started three PMA chapters in the eastern, western and southern regions.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes, PMA has a strong link with the government and organizes various programs in association with the government. PMA was successful in organizing four major events in association with the government, namely, the Department of Public Enterprises and the Department of Program Implemen-

Experience, Cooperation and the Future

tation. The Department of Program Implementation is the key government department responsible for the planning and execution of all mega-projects in India.

PMA is also linked with prestigious institutions such as the Indian Institute of Technology, Delhi. At present, the relationship is more of a dotted line and we hope to strengthen this.

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INDONESIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Since the publication of last year's Global Report, Indonesia has moved toward the formal recognition of project management as a profession. Toward this end, the following milestones have been achieved:

- A PMI chapter has been formed in Jakarta, representing the entire country, with the intent of forming subchapters as demand grows.
- A subchapter is in the process of being formed in Irian Jaya, serving the Freeport McMoran operations.
- A subchapter is in the discussion stages for Pekanbaru, serving the needs of Chevron, Texaco (Caltex Pacific Indonesia) and BE&K (Riau Pulp & Paper).
- PMI has gained recognition from key government agencies, in particular the National Planning and Development Board (BAPENAS) and the Institute Teknologi Bandung (ITB), one of Indonesia's leading technical universities.
- Sponsored the first PMP exam, in which 13 participants took the exam, with one passing outright and five missing less than two sections.
- Sponsored the next exam to be held in December, with approximately 25 candidates participating.
- We are in the process of introducing the concepts and philosophies of modern project management to the National Public Works Department, Ministry of Mining and Energy and Ministry of Industry and Trade.

What industries or types of projects are the main users of modern project management in your country or region today?

The key industries using modern project management in Indonesia today remain primarily the construction industries, with infrastructure, telecommunications, energy and power and process- petrochem leading the way. Heavy Industry and Aerospace, in partnership with US or European partners are also quickly adopting projects as the preferred delivery method. Multinationals such as Citibank, World Bank, various Pharmaceutical firms and the World Health Organization are closing the gap as the newer users of modern project management. Acceptance and recognition of project management as a stand alone profession is gaining in both popularity and acceptance by both the public and private sectors. The Asian Free Trade Agreement (AFTA) is mandating unrestricted free trade by 2003, which is driving the Indonesian professionals to seek out and obtain "World Class" means and methods.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

As the Government of Indonesia (GOI) makes the transition from predominantly a state run (BUMN) to a free market, the greatest need for project management procedures is to assist these quasi-governmental companies move to full free market competition. **As** the economy of Indonesia is currently

based predominantly on natural resources, the primary industries remain **construction**, mining, petrochemical, pulp and paper and agribusiness. Downstream processing, such as plastics, fertilizers, fuel products, fabrics and LNG are being aggressively developed, along with the infrastructure (roads, waste & potable water, land, sea and air transportation improvements, resort development), are all combining to make the Indonesian economy one of the brightest in South East Asia. Thus, the needs for project managers include every single area of specialty (SIGS) currently represented by PMI.

One of the most successful examples in the use of modern project management techniques in Indonesia has been by the National coordination Body for Family Planning (BKKBN) which has used project management to implement a totally integrated family planning program throughout Indonesia.

How can the project management profession be most effectively advanced in your country?

One of the major obstacles to developing project management as a profession is the cost of professional membership and certification relative to the salaries of professionals in developing nations. A campaign is being waged to encourage the multinational companies to support the growth of the profession by:

- Paying for young professionals to join and participate in PMI
- Subsidizing or paying outright for training and certifications costs
- Increasing the performance pay for those getting certified
- Incorporate training and certification as part of the "Career Development" and "Technology Transfer" programs
- Additionally, aggressive marketing and increased awareness of PMI and the certification programs would be most helpful in creating a climate of acceptance and recognition of professional accomplishments. Without broad recognition and acceptance by the funding organizations that PMI/PMA certification "Adds Value," there will be no willingness to pay a premium for earning these credentials.

What impact will globally recognized project management standards or certification have in your country?

One of the major drivers for obtaining certification is the pride of earning recognition as having achieved "World Class" status. Accordingly, there is a strong motivation to close the large gap between existing professional salaries and those enjoyed by professionals in other nations as Indonesia moves towards a "free" economy. Aside from the individual rewards, the country stands to gain as the rate of growth is double that of the already developed nations, thus the amount to be saved by implementing "best practices" of the profession will be significantly higher than in the already developed nations. By adopting modern management techniques, it will increase the odds that the environmental and other "lessons learned" by the developed nations can be transferred to Indonesians. At the company level, having a "cadre" of professional resources of known quality will increase the competitive advantage of the local companies as they move towards an unregulated economy.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

One of the primary considerations for any project management is to keep it at a high enough level to allow the freedom for cultural and political "interpretations" to exist. Thus it is important that any PMBOK or standardized processes act only as a "Framework" and not go to such detail so as to preclude local values customs and traits.

How important will international "Standards" for project management be in your country or region? Please comment.

At this point in Indonesia's growth, International Standards are important to insure that the local pool of professionals is able to meet some "minimum" standard of professional competency. Once this minimum competency is firmly established, it will be possible to "grow" as the demands and complexities of our projects grow, enabling professional self sufficiency by early in the 21st century. Until the introduction of PMI's PMP program, no formal knowledge-based opportunity for professional benchmarking existed. Ultimately, we would like to see this improve to competency based programs. The important aspect at this time is to have qualified professionals available to staff senior positions in managing our projects now to ensure the growth and development of the locally based knowledge and skills in the context of the project management framework.

Is project management certification of interest in your country? What type of project management certificate?

Most assuredly! There is a great pride that Indonesians hold for their country. The country has a core of well educated, highly motivated and skilled work force. They are eager to establish their mark in the world, and internationally recognized professional certification programs enable them to benchmark their skills and knowledge against their professional peers. This is particularly important in that expert professionals have for years commanded significant premiums, and now that Indonesia is "coming of age," professional certification can become a tool to legitimize their claim as having "arrived."

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

The primary interest in PMI by Indonesians is in professional networking and an exchange of ideas, concepts and tools of the profession. Given the population of Indonesia, Malaysia and China, and both the short and long term project potentials, we would like to encourage PMI to consider holding the first International PMI meeting (outside of North America) in Jakarta, Singapore or Hong Kong. This should be done in conjunction with the AFTA implementation date of 2003. The impression is that PMI is primarily a North American Organization, and not truly representative of global professionals.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

As Indonesia is the fourth most populous country in the world, it would be great to collaborate to have many of the publications translated into Bahasa Indoensian. While the top professionals generally speak English, many of the project level managers do not. Thus, there is a shortage of books, publications and courses to bring the message of modern project management to the "worker" level.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

While scattered Indonesian national professionals have been members of PMI since 1981, formal attempts to create a PMI chapter were not initiated in 1985. The first attempts were not widely supported, as the awareness of PMI and modern project management methods were not well known. The second attempt to introduce PMI in late 1994 was successful when PMI Indonesia was founded by a core group of dedicated project professionals. While the initial going was slow, we have started the ball rolling, and it now seems to be gaining momentum daily.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes, our chapter charter was expanded to include seats for both government liaison and academic representation. In our early formation meetings, we recognized the need to include a government link as well as a university connection. Toward this end, we have included permanent seats on our board of directors that are intended to be filled by individuals representing those institutions.

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IRELAND

(University of Limerick)

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

There is no recognized project management profession in Ireland. The plan within our organization is that during the course of 1996, a sponsor will work with an interested core of individuals to establish a PMI chapter covering the island of Ireland.

Within the Republic of Ireland, **i.e.**, excluding Northern Ireland, education in project management is relatively new, although one university has been running a diploma course in project management for over 20 years. One other university has recently created a diploma in project management. The University of Limerick established a Centre for Project Management in 1991 and since 1993 has offered a part-time master degree course in project management leading to the award of M. Proj. Man. The same university is about to offer a diploma in Project Management (**Dip.PM**) which will be available through distance learning.

There is a growing interest in Ireland to institutionalize project management. The lack of a meaningful institution means that growth is being restricted.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

The industries that are the main users of the project management process are:

- Banking and banking systems
- Communications (TV, other media)
- Information systems
- Institutional and commercial building
- Infrastructure construction
- Light and heavy construction
- Light manufacturing (computer components, computers, etc.)
- Power utilities
- Process industries (chemicals, metals, etc.)
- Software development.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of the **project** management professional in your country? Why?

The industries that have the greatest need for more effective project management are:

- Construction
- Healthcare
- Information technology
- Manufacturing.

The industries that offer the greatest growth opportunities are:

- All public sector work because Ireland's expenditure on capital work developments is heavily weighted (over 85 percent of all capital expenditure) towards national infrastructure projects, law and order projects, health projects, education projects, etc.
- The manufacturing industry because computers or computer components form a large part of manufacturing in Ireland. In order to handle the exponential change in the market for computers, manufacturers are already turning to project management.

How can the project management profession be most effectively advanced in your country?

The profession has a reasonable educational base from which to grow. What is missing is a professional institution which, if available, would give the small "cadre" of professionals and others a focus for progressing their interest and would provide the opportunity for further personnel development.

There is a fledgling association of about 100 members called the Association of Professional Project Managers (APPM). APPM, which has some sort of affiliation with the APM of the United Kingdom, has apparently found it difficult to rise beyond their current membership. Attendant difficulties have been: facilities for individual certification, professional development, etc.

There would appear to be little merit in starting an embryonic institution and then attempt to "plough the same furrow" as our predecessors. It is generally felt that the best option open to advance the project management profession in Ireland is to create a PMI Ireland Chapter and in that regard the first steps have been taken.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

As we can at the very early stages of conceptualization global standards or certification would have little impact on our current position. In Ireland, as a member country of the European Union, we are used to centralist strategies and complying with the resulting standards and procedures.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

There are a number of topics which are important to project management which have not yet been recognized as part of the PMBOK. For example, system dynamics in an area which affects many project manager's projects yet we have not embraced the natural lineage of project management, that is, systems management.

Another example is the area of value; the importance to the project management of cost-quality-function-value is only half covered by the PMBOK, i.e., cost and quality.

The eventual content of a global PMBOK should not be the current issue. It would seem more pragmatic to see the issue as the structure and country representation of the drafting committee.

How important will international "Standards" for project management be in your country or region? Please comment.

In the short term they will not be important but will become more so as the profession in Ireland matures.

Is project management certification of interest in your country? What type of project management certification?

Certification is currently of high interest.

It is possible that two types of certification would be of interest; a practising project manager (P.Proj. Man.) and a certified project manager (C.Proj.Mgt.). The PPM being an optional first step to full certification. PPM should be based upon academic record and experience of managing projects. CPM should be based on PPM requirements plus specialist examination, essay, and interview.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Unification would certainly bring standardization on PMBOK, certification, and so on, but there may be special national features needing to be accommodated that a unified approach may not be capable of accommodating. At the present time, Ireland would probably have a neutral position with regard to unification simply because it is a concept which is far in advance of our starting position.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

There should be a world of congress, say every two years, which would provide a forum for all project management associations to discuss and benchmark their current status.

All project management associations should be encouraged to create a home page on the World Wide Web. Each association should coordinate project management developments within its own area and through the WWW create a monthly "flyer" which provides readers of the Internet with an update on project management development, applications, successes and failures, etc.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The University of Limerick campus is situated on 500 acres of parkland on the banks of the River Shannon just to the east of Limerick city. With a population of 60,000 people Limerick is the third largest city in Ireland, located only 16 miles from Shannon International airport, and is an important traffic center for Ireland's mid-west region.

The University is the centerpiece of Limerick's national technological park, one of Ireland's premier business locations. The park is home to over 80 organizations. It includes Ireland's first innovation center, a concentration of new high technology companies, multinational corporations and R&D laboratories. The University of Limerick is established under law by the Irish government. It undertakes programs of education and research to doctorate level in its six constituent colleges.

The pursuit of excellence in teaching and research to the highest level has been the prime mission of the university from the outset. Implementation of this mission has been constantly conditioned by the creation of relevance to the world of work, and as new programs of teaching and research given to those areas judged to be of strategic benefit to the economic and social development of Ireland.

An endowed chair in project management was established at the university during 1991; a professor was appointed and commenced his duties on November 11, 1991. In early 1992, a Centre for Project Management was established as part of the College of Business. The director of the center is the professor for project management. In June 1993, the Center was relocated to the research area within the newly opened Foundation Building.

In January 1993, a part-time master's degree course was commenced. The course delivery has been designed for graduates in industry who would not consider a full-time option as being a practical alternative. A third course of the credits involve the student undertaking a major research project and the presentation of a dissertation upon the research completion.

A distance learning course, which is intended will to lead to the award of a continuing education diploma in project management, has recently been developed.

Experience, Cooperation and the Future

Training courses for the companies and to groups of individuals in most of the basic techniques of project management commenced in January 1994. The objectives of these ready-made and be-spoke courses are to offer real skills and an improvement in the effectiveness of individual work performance.

Seminars and workshops in project management, designed and presented under the aegis of the CPM, are held from time-to-time at different venues throughout Ireland.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

The Centre for Project Management through the University of Limerick has established relations with Ireland's other universities and certain universities within Europe. We have also established relations with certain **government** agencies in Ireland.

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IRELAND (IPM)

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

While project management in Ireland today would be in an early growth phase, the level of interest in it as a discipline is accelerating. It would not be formally recognized as a profession, but rather as a complementary skills set to an existing professional qualification such as engineering, accounting, marketing, etc.

What industries or types of projects are the main users of modern **project** management in your country or region today?

Project management, as an existing discipline, would be firmly rooted in both the construction and information technology industries. These industry sectors would advertise specifically for project managers. However, if one equates "modern project management" to the management of change within organizations, it is only at a very early stage.

What industries or areas of application in your country have the greatest need for more of better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

These organizations offering growth opportunities spread across many industry sectors:

- State
- Semi-state
- Financial Services
- Manufacturing.

Many of these organizations are encountering major changes (**e.g.**, the semi-state sectors are facing new liberalization and anti-monopoly legislation). The requirement for a "program and project management" approach to plan, prioritize, and **coordinate** projects and resources is a credibility in organizations that have applied it with executive commitment. We believe that the absence of skilled and expert practitioners of modern project management within this context is a hindrance to more dramatic growth in this area.

How can the **project** management profession be **most** effectively advanced in your country?

The project management profession can be most effectively advanced by offering interested parties a focal point such as our own national organization in conjunction with a strong infrastructural back-up support from a body such as PMI. Our cooperation agreement with PMI has been very beneficial in promoting the development of project management here. The mega trends of membership and certification growth in the U.S.A. are readily recognized as waves which will wash over to a large degree both domestically and internationally.

What impact will **globally** recognized project management **standards or certification** have on the **project** management profession in your country?

We believe that a globally recognized project management certification will enhance the interest of people in bolting on such a recognition to their primary **professional** degree. There is a demand on

our young, educated workforce to be much more internationally mobile than before, especially in the context of our role within the European community. A globally recognized certification will lead to greater marketability and shift acceptance of its validity in multinational companies and across national boundaries. We are witnessing this phenomenon with individuals and organizations keen to pursue PMP certification which our cooperation agreement with PMI enables us to promote.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

We are of the opinion that the new PMBOK is fine as the basis for the core knowledge required for project managers. Within the "communications" module, we believe that there is an opportunity to provide a concise session on "Project Presentation" which should address how a project manager presents a project to the executive or board level of an organization.

We also think that consideration should be given to addressing Formal V's informal project management. The growth area of "management by projects" within the organization needs flexibility and informality aligned to the structured approach.

How important will international "Standards" for project management be in your country or region? Please comment.

International "standards" are not a significant domestic issue at the present time. This situation will change in the short term as EU harmonization progresses and the USA and other multinational organizations seek consistency on uniformity in their satellite organizations' approach to project management. International standards aligned with recognized certifications will render project management a very attractive option.

(See also "What impact will globally recognized ...")

Is project management certification of interest in your country? What type of project management certification?

Certification is of considerable interest in our country. The first form of recognition/certification looked for is a formal body to certify educational/training programs undertaken. This is viewed primarily as an extra academic qualification enables individuals to be more marketable within their company and/or in the employment marketplace. Certification as a PMP provides a natural progression and focus for such individuals.

What is your interest or position on a unified global project management association or organizations? If you support such an organization, how should it be organized and for what objectives?

We believe that national organizations will likely wish to maintain some form of identity which will appeal to their indigenous membership. We support the concept of a unified global project management association which will accommodate these cultural considerations. Such an entity should be an umbrella organization with a strong infrastructure base which would be capable of supporting the needs of the member bodies and associations. It should also work towards the development of universal standards, accreditation and certification criteria. We do not necessarily believe that national, cultural and identity concerns, are an impediment to a universal certification such as PMP.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Project management associations around the world can communicate and cooperate through people, journals and technology.

Our primary purpose in attending conferences is to establish personal networks and to swiftly gain information and experience through personal contact.

Our primary journals' are:

- *International Journal of Project Management*
- **PM Network.**

Both publications offer quality materials which help us to keep abreast of current developments. We find that **PM Network** provides a more vibrant and lively presentation format.

From a technology perspective, we believe that the best opportunities to communicate are through the Internet medium. This medium offers a quick and cost-effective mechanism for global communication which also enables excellent cooperation between interested bodies. We use it extensively to keep abreast of developments within the profession.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The Institute of Project Management (Ireland) was founded in 1989. Many professional societies had attempted to serve this need through the creation of sections, divisions or special interest groups. These efforts did not fulfill the need of specialists in the field. For these reasons, the Irish organization devoted solely to project management was formed.

The principal objectives are to:

- Promote the "management by projects" approach to service the challenges facing business
- Create an environment in which project management techniques and experiences could be developed and shared
- Offer guidance for instruction and career development in project management
- Encourage the application of project management skills to a diverse range of disciplines and provide training in project management development.

The activities include symposia, seminars, workshops, lectures and publications of papers and professional journals which are all geared to heighten the awareness and promote interest in project management. For example, the symposia we organize tend to be done in conjunction with high-profile organizations which have recently undertaken very visible and well-known projects. This provides credibility to the topic of project management, attracts a wider audience, and introduces many of those to the opportunities and benefits that project management can bring to their own organization.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Our organization does not have any established links with agencies or departments of government at this time. However, in the last year we have established close liaison with two major government departments.

The National University of Ireland is composed of three separate universities spread geographically throughout the country. We have entered into arrangements with two of these University College Cork, Dept. of Management and Marketing and University College Galway where by we run joint programs in project management. Participants in these programs and other interested parties are also offered the opportunity to undertake the PMP examination in Ireland. We believe that developments such as these are under-pinning support for the effective promotion of project management as a credible professional development platform.

ISRAEL

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

Project management in Israel is very advanced and continuously grows. There is a strong awareness of the need for project management skills, although there is not complete agreement on what these skills are. All major universities offer courses on project management at both graduate and undergraduate levels, and many educational organizations offer professional development courses of various lengths and contents.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

The main users of project management are companies from the high-tech, construction and electric utilities industrial sectors, with some growth noted in the software development sector.

What industries or areas of application in your country have the greatest need for more of better project management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

In general, there is significant potential for increased application of project management in all areas. The industries or areas that have greatest need for more project management are public and social services, government and the software industry.

How can the **project** management profession be most **effectively** advanced in your country?

The following are possible ways to advance project management in Israel:

- Adoption of PMP certification by leading employers
- Offering of advanced degrees in project management
- Definition of standards for project management.

What **impact** will globally recognized **project** management standards or certification have on the **project** management profession in your country?

Globally recognized project management standards will enhance the field as they will encourage companies to send their employees to receive formal training where they will be able to expose themselves to the more advanced techniques.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (**PMBOK**)?

The global PMBOK should include, in addition to methodological subjects, coverage of issues such as local and international law, cross-culture communications, dealing with language barriers, etc.

How important will international Standards" for **project** management be in your country or region? Please comment.

International standards will provide a significant momentum to the recognition of project management as a separate profession (just think what ISO 9000 did for quality management).

Is project management certification of interest in your country? What type of **project** management certification?

As it stands right now, there is little awareness of project management certification in Israel. The first project management certification exam in Israel took place in June 1996 with 14 participants. We expect that as the chapter grows, participation in the exam will increase.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

We are in favor of having a global project management association since many projects require integrated efforts in a few countries at the same time. The board of directors of such an organization should consists of regional representatives.

How can project management associations around the world better communicate and cooperate to advance the **project** management profession?

The various organizations should form a global federation and work together to promote **international** standards and a common project management language.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

The Israel chapter of PMI was started about a year ago and was formally chartered in July 1996. Currently, there are about 50 dues paying members, representing a wide variety of industries.

Does your organization have established relations with agencies or departments of your government, or with **universities**? Please describe.

Tel Aviv University informally sponsors the PMI chapter by providing office support, mainly as a result of the fact that two members of the chapter board hold full-time faculty appointments. The chapter is looking into recruiting other organizations as formal sponsors.

ITALY

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management in Italy is growing, but not homogeneously. In some industry sectors it could be considered to be mature (e.g., engineering and construction, aerospace), in others it is in its infancy (e.g., banking and insurance, information technology, public services), and in yet others (e.g., telecommunications, civil construction) it is somewhere in between. (Recent legislation requiring that project management be used on all public works contracts should contribute to the diffusion of project management, but the guidelines given in this legislation are still sufficiently vague to allow political interference.)

There has been a general, gradual awareness creeping across the country over the last 10 years or so. Lots of people in all industries talk about it, but most do little, mainly because they do not have the power, the experience of "selling" it to their top management, or have sufficient real knowledge of the project. A good example of this is in manufacturing, where project management has had mixed success.

Awareness programs are carried out mainly by the Project Management Section of ANIMP (the National Association of Italian Engineering and Construction enterprises), which has an annual national seminar and holds half-day seminars aimed at the use of project management in a variety of industries. In addition, some of the vendors of software products for the sector have user association meetings that provide some general education and help to create awareness.

What industries or types of projects are the main users of modern project management in your country or region today?

Difficult to answer this one. It depends on one's understanding (the definition) of modern project management. However, as said above, the main thrust of management in engineering and construction companies is to use modern project management methodologies, techniques and software support tools to "manage by projects," although most do not, at least officially, recognize their management as such.

The main types of projects in which project management is used are industrial engineering projects and large infrastructure projects; e.g., construction of Italy's high-speed rail system. (Project management is also used by the principal Italian makers of the rolling stock for high-speed rail systems.)

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Public services is probably the sector in greatest need of more and better project management, notwithstanding recent legislation that requires the use of project management in public service contracts. The driver of this legislation was the European Union requirement for Italy to align itself with EU regulations and legislation in relation to providing equal opportunities on public service contracts for enterprises throughout the EU. (There was much political resistance and the result is a fairly "toothless" law which, however, is a very welcome step in the right direction.)

Experience, Cooperation and the Future

The industrial sectors that will provide the most opportunity are manufacturing (medium-sized enterprises —most of Italy's industry is small to medium-sized) and financial services (banking and insurance). Information technology is another area of opportunity and the developments in this field are such that the rate of change is inducing (or should be) management to look for ways to leverage their investment in information technology. This is creating a groundswell of interest in project management as a management tool in the industry.

How can the project management profession be most effectively advanced in your country?

Through awareness and education programs carried out at national level by a truly "independent" organization that is acceptable across all industrial sectors. Notwithstanding the fact that there has been a project management association active in Italy for about 15 years (the Project Management Section of ANIMP), that has done a lot to increase the awareness of project management in Italy, there is still no recognized independent organization that can fulfill the role of "leader" in the promotion of project management across the spectrum of industries and agencies in the country.

The Project Management Section of ANIMP does a very good job but it has the limitation of being perceived as ANIMP; to become a member of the Project Management Section, one has to be also, or first, a member of ANIMP. Although there are a number of our members from telecommunications, manufacturing, and other industrial sectors, the great majority are from the engineering and construction sector. Many people and organizations who would be otherwise interested in joining are put off by this aspect. They believe— maybe wrongly—that the accent of the association is heavily biased towards engineering and construction and that, therefore, there is not enough for them to gain from being a member.

However, our continuing commitment to education is paying off—albeit quite slowly—and we are reaching many more people from outside engineering and construction today than we were a few years ago. A sample from our 1995 education program follows:

- General course for project managers
- General course for proposal managers
- Project risk management
- Project management in manufacturing
- Project management in civil construction
- Safety in project engineering and construction
- Evaluation of work progress during construction
- Critical phases of projects.
- Feasibility studies in private and public service companies.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Again a difficult one to answer. One of the big problems is achieving recognition by "government" of project management as a profession, a situation that is fairly common across European countries, and then agreeing on recognized standards for certification. Therefore, globally recognized standards would be very welcome, and would help in our negotiations with national educational bodies. Our organization is working within IPMA toward producing core European standards; we also have the intention of creating a certification program that reflects IPMA standards for Italy.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

Our organization believes that the new structure of the PMBOK, covering 9 fundamental topics, is fine as the basis for the core knowledge required for project managers. However, perhaps topics covering the political and financial aspects of project management should be included.

As the various associations around the world solidify their own experience, documented as "Bodies of Knowledge," maybe this could be included in some form of "Global PMBOK acceptable to both the profession and industry, which could provide the basis for certification and could serve as a basic international accreditation.

How important will international "Standards" for project management be in your country or region? Please comment.

Those organizations and enterprises that work in the "export" sector have to follow international standards in order to be competitive, so any recognized international standards are very important. Nationally, standards are important and the public service sector follows those defined by recent legislation. In general, Italian standards are becoming ever closer to European standards. Italian industry will have to focus on European and other international standards in the future.

Is project management certification of interest in your country? What type of project management certification?

It is of undeniable interest, but this interest has fluctuated over the years. It could be said that interest is growing again, mainly within the profession. It is difficult to judge the degree of interest in sectors outside of engineering and construction, where interest is mainly related to international requirements.

Our organization is very interested and we will follow the IPMA lead in this area.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

We are very supportive. The idea of having global cooperation among associations has been on the table, especially IPMA and PMI, for a number of years. Advances have been made on all sides (via the various cooperation agreements between PMI and IPMA) and maybe this is the time that tangible agreement could be achieved toward something more substantial. It would be necessary to create a platform that satisfies the differences in culture and mentality of the various geographical regions. For example, it is our feeling that European culture and mentality are more oriented toward the methods and philosophy rather than to the tools. One objective could be to find a common language and a common approach to problems.

It is implicit that any global "federation" be based on the recognition of national and regional bodies; that qualification/certification be, in some way, interchangeable; and that national/regional cultural needs be fully represented.

A "global" association could be organized on a regional basis, with industry "groups" cutting through the regions; or vice versa. The mechanics of this would have to be worked out equitably in accordance to the "power" and representation of the existing bodies, and in relation to what they "bring to the table." We would want to avoid a United Nations type of situation where politics consume most of the energy. We would also need to overcome inter-society, or inter-association, rivalries such that representation of members from any "local" or "international" association (e.g., ANIMP, PMI or IPMA) would be through delegates from any one, or more than one, of these associations.

Experience, Cooperation and the Future

The questions: Do the professional associations have a real mandate from their members? Is there, or has there been, sufficient time to prepare a "vision" and, if so, has this been communicated to all sufficiently well? Do we need to do this? Are there any examples of global associations of recognized professionals (e.g., architects) from which we could learn and take guidance? Maybe the AICE/ICEC experience could help, and it could be that it is the closest to what we have in mind.

As project management professionals we should recognize that change for the better is a good thing. An opportunity, which has quite a short "window," exists to actually reach agreement to establish a global federation of project management associations, if we can overcome parochialisms and regional biases, etc. This would be a good thing. To achieve it, we have to insist that our "leaders" actually show true leadership and develop the "vision" for the future; they are the "change leaders." They have to develop strategies for producing the changes in the internal processes of the existing organizations that are necessary to achieve the vision. They have to define new directions and communicate these to those who understand the vision and are committed to its realization, and who can create the coalitions necessary to assist the process. A "movement" has already started. The leaders of the main associations involved have to maintain this movement, they have to maintain the direction and they have to ensure that the proper input is given to overcome obstacles to the changes that are necessary to achieve the vision. The window of opportunity is closing all the time; we have to reach agreement now if we want to ensure that the opportunity does not slip from our grasp.

The objectives of a global federation would be:

- Coordinating the development, and the maintenance, of agreed upon international standards for knowledge, competence, etc., for the profession of project management
- Providing a means of communication between national associations and for the coordination of activities at the international level
- Providing a means for responding to the requirements of national associations
- Providing a channel for the interaction and cross-fertilization of ideas and new developments in the profession
- Providing a forum for communication between project management professionals who have international interests.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

To some extent the answer is given above in the objectives of a global federation. Networking between professionals in various parts of the world already takes place on a personal basis. Of course we also have to motivate and inspire the continuation and widening of this, and it could be improved if we had a structured forum at global level. We also have to create the interest.

Currently, the membership of multiple organizations allows people from different nations and associations an insight into what others are doing, via the publications of the various national organizations to which these professionals belong. However, this is somewhat cumbersome and some means should be explored as to how these professionals can get access to the content of these publications without necessarily being a member of the publishing organization. A global association could be part of the answer as the Internet is part of the answer today. Maybe we should set up a PM site on the "Net," if it has not already been done. This, however, is only helpful to those who are in a geographical region that has good communications; there are still many parts of the world where it is difficult to access Internet.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The association had its origins in the engineering and construction industry. A group of project managers got together about 15 years ago and started the first serious discussions on how to form an association. The leaders of this group were already international members of Internet (now IPMA) and the focus was on forming an Italian association that could be part of the Internet family.

The outcome was that the association was formed within ANIMP, mainly because the members of the group were nearly all from enterprises associated within ANIMP, but also the problem of initial financing was overcome in this way. ANIMP registered with Internet as the official Italian Project Management Association (it was the only one and still is) and we were on our way.

Milan-based, the association is a Section of ANIMP and is governed by an elected board of 11 members. Elections are held every two years; each dues-paid member of the Section has a single vote; and the chairman is chosen by the board from the elected board members.

The main objectives of the association are to:

- Promote a professional approach to, and to advance the discipline of, project management
- Provide a forum for project management across all industrial sectors, thereby increasing cross-fertilization of ideas and communication
- Increase awareness of project management at all levels within society.

The association is the only Italian organization that provides a forum for project management in the country. The association is a non-profit organization and is a voluntary body that works for the benefit of its members. It also attempts to provide a unifying influence for project management across all industrial sectors.

Our membership has fluctuated over the years and we have 149 dues-paid members today. Membership has decreased in recent years, reflecting the harsh economic climate and other difficulties that Italy has had to face during this period.

Service to our members includes a monthly journal *Impiantistica Italiana* (Italian Engineering) published by ANIMP and a quarterly newsletter, "Project Management News."

With the aim of increasing the strength of the association, our main strategies for the future are to:

- Continue our efforts to spread the presence of our association throughout the country
- Launch a project management certification program (in symbiosis with IPMA).

We are implementing this strategy by increasing our contacts with universities and, to increase our visibility and allow us to create local working groups and increase our appeal, by establishing a number of local reference points in other cities. We have just established a local reference point at the University La Sapienza in Rome.

Does your organization have established relations with agencies or departments of your government, or with universities?

We have close relations, via ANIMP, with other national industry associations (e.g., OICE – Organization of Italian Construction Engineering companies) and with academia. The Italian association is part of ANIMP, which has a number of university professors on its board, many of whom have an increasing interest in project management. We have no relations with government agencies because these have little or no interest in us and are not receptive, notwithstanding the recent legislation related to the use of project management in public works contracts.

JAPAN

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The stage of maturity of the project management profession in Japan can be classified as growing on an overall scale. There is wide variety of project management maturity depending on the industry affiliation, as follows:

- Engineering and Construction: Mature with 40 years of project management practice
- General Construction: Growing to mature
- Manufacturing: Newly introduced
- Information Services Industry: Newly introduced to growing
- Public Services: Virtually not introduced yet.

What industries or types of projects are the main users of modern project management in your country or region today?

The engineering and construction companies operating in oil and gas, chemical, industrial and large infrastructure projects are the main users of modern project management in Japan; all of these companies engineer and build plants and other facilities worldwide.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

The general construction industry will draw on more comprehensive project management processes as the size and complexity of their construction projects grow and as needs for CM (construction management) are further identified. The manufacturing industries will start realizing the benefits of project management with an increasing share of project-style business operations.

How can the project management profession be most effectively advanced in your country?

The project management profession can be advanced through strong initiatives of ENAA and its Project Management Committee as Japan's primary association that promotes project management; such initiatives include joint research on project management technology issues, seminars and workshops, cooperation with PMI and other professional associations on issues of common interest, and publicity activities on project management toward the Japanese industry.

ENAA is studying, through its dedicated task force, the formation of a project management forum in addition to the PM Committee, in which project management practitioners will network, cross-fertilize and join efforts as individuals to more effectively advance the project management profession.

Further, as a general trend, the ongoing changes of the Japanese industrial circles for globalization and more professional services orientation will generally accelerate the awareness of project management benefits and help advance the project management profession.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Globally recognized project management standards, if they refer to global core PMBOK, not detailing what to do, will be welcomed by project management practitioners in Japan as they can reference their efforts for professional advancement primarily to such global standards as a baseline.

Referring to global project management certification, we doubt its viability if a single, unified certification system is to be pursued, as there are two certification orientations, *viz.* certification supporting minimum competent performance required for entry level project management professionals, such as PMI's PMP (preferable if we are to certify project management professionals without regard to application areas) vs. certification calling for fully competent project managers, as in AIPM and APM's systems (preferable if industry specific competency is to be certified). The gap between the two could not probably be filled. More realistically, we should endeavor for an international basket of mutually recognized national or regional certification systems with or without common competency criteria, which we believe would be welcomed in Japan and elsewhere as targets for professional competency evidence.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

We consider that both the PMBOK Guide of PMI (March 96 version) and the Core Framework for Project Management Knowledge being prepared by a group of PMI-IPMA-AIPM-ENAA are well organized Project Management Body of Knowledge documents which deserve recognition as a global PMBOK.

The PMI PMBOK Guide could be recognized, as it is, as Global Project Management Body of Knowledge as a full version. It covers all the essential knowledge areas and then processes of project management which can selectively apply to projects of particular types and regardless of project locations, and the PMBOK Guide admits such flexible, selective application.

The Core Framework for Project Management Knowledge, while still under preparation, will be a fine short version of PMBOK, which will provide a framework and will leave details to each country/region/industry.

How important will international "Standards" for project management be in your country or region? Please comment.

International project management standards, if used as broad guidelines, would be welcomed as an international referral vehicle in project management. Any single, unified set of project management standards intended for universal application should not be imposed, since project management is not precise science or engineering. Its processes should reflect application area specifics, sizes and interface complexity of projects (rather than national or regional characteristics, as generally believed).

Is project management certification of interest in your country? What type of project management certification?

There are always supporters of some types of project management certification as a target for professional advancement and as proof of professional competency; however, there is, as yet, no consensus on the type of project management certification.

It is, however, noted that the category of project engineering has recently been introduced into the Japanese system of state qualification of professional engineers. The project engineer defined here is more of a project manager nature than an engineer and there is a growing interest in this title among contractors, project managers and project engineers.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

ENAA or its Project Management Committee is not in a position to be part of a unified global project management association since ENAA is not a professional association but is an engineering services industry association participated in by business firms. However, ENAA would be most pleased to maintain a cooperation agreement with such a unified project management association, once established, as it now does with PMI.

To be successful, such a unified organization should not cluster around countries or regions but should consist of streams of project management professional along industry branches should have operating, functional committees across industry branches. Area or city based local chapters, as with PMI, would be a prerequisite for fostering fundamental professional advancement.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Associations should first agree on principal, specific themes of joint pursuit for the advancement of the project management profession and the way to follow up on them through regular contacts. The Global Project Management Forums will be excellent opportunities to lay the foundation for enhanced communication and cooperation among project management associations.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

ENAA was established in August 1978 as a non-profit organization dedicated to the promotion and capability enhancement of the Japanese engineering services industry. ENAA is participated in by Japanese engineering services and related companies and is supported by the Ministry of International Trade and Industry (MITI). ENAA's Project Management Committee is a division of its Project Engineering Committee (steering organ) and has existed since the foundation of ENAA.

The ENAA Project Management Committee has such broad objectives as:

- Advance the project management capability level of the overall industry through cross-fertilization
- Conduct collective research on the state of the art of project management
- Provide, through combined efforts, practical solutions to project operations issues
- Provide a forum for professional development in project management.

The committee is currently represented by 46 companies (engineering and construction companies and large manufacturing companies having contracting engineering divisions). Its activities are carried out through committee meetings, steering member meetings, research by funded research task forces and nonfunded study groups and seminars.

The current themes of emphasis in the committee include the globalization of Japanese EC companies, creation of a core body for professional advancement of project management, cross-industry approaches to project management practices and competitiveness in project management technologies. Over recent years, the committee has produced the following deliverables among others:

- Cost engineering in the 90's (1992)
- Contemporary Project Management Information Systems (1993)
- Broad CAE integration of CAE and PMS (1994/95)*
- Practical Guide to ISO 10006 "Guidelines to Quality in Project Management" (1995)
- Global Engineering/Procurement Operations of EC Companies (1995)
- Proposal on a Body for Professional Advancement of Project Management (1995).

*presented at PMI '95

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

ENAA is officially supported by the MITI as mentioned above, It has no established relationship with Japanese universities as they have no comprehensive project management curricula.

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SOUTH KOREA (PROMAT)

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in **your** county **today** (i.e., newly introduced, growing, mature)? Please comment.

Generally, the project management profession in Korea is considered to be at the newly developed stage. However, there is growing concern for the project management profession in the construction industry and utility areas.

What industries or types of **projects** are the main **users** of modern **project** management in **your** county or region **today**?

The construction industry and utilities are the main users of modern project management.

What industries or areas of application in **your** country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in **your** country? **Why**?

Project management could be best applied to construction, utilities and R&D areas. Especially the utility area offers the greatest opportunities for the growth of professional project management, considering the enormous amounts of money involved and its significant impact on other industries.

How can the **project** management profession be most **effectively** advanced in **your** country?

Since PROMAT, a non-profit professional organization, has been offering such services as annual symposia, seminars, educational classes and journals to the nationwide project management professionals, we believe it can effectively foster the rapid advancement of the project management profession in Korea.

In particular, PROMAT has been making solid efforts on establishment of national legislation in association with government and industries in order that project management may legally be used in most of the public projects.

At the same time, international technology exchange between outstanding professional organizations such as PMI and IPMA could also help the advancement of the project management profession.

What **impact** will **globally** recognized project management standards or **certification** have on the **project** management profession in your **country**?

Since the project management profession is at a relatively early stage and vigorously growing in Korea, earlier establishment of global project management standards or certification might be rather easily introduced and applied to our system as a good guideline for the future direction of our project management profession, education and certification.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

We think the contents of the current PMBOK is well inclusive.

How important will international "Standards" for project management be in your country or region? Please comment.

As the industry becomes globalized, the necessity of international standards, mutual cooperation between countries through international systems, must be more efficient and effective.

Is project management certification of interest in your country? What type of project management certification?

There is a need for certification of Project Management Professionals accredited by government or PROMAT. Thus, PROMAT has already suggested this type of certification to our government, which has already started the study for the feasibility of the certification.

If an international certification is introduced for global use, the adoption of the system will be positively considered in our country.

What is your interest or position in a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Once there is a consensus among project management associations, we think a unified global project management association can serve as an effective and authoritative role for the global project management profession.

The purpose of the organization may be to promote cooperation among national and multinational project management associations worldwide for their mutual well-being and that of their individual members.

A member of the unified organization can be a national or multinational project management association or organization that is non-profit.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

It is possible by establishing an advisory committee of representatives from project management associations around the world, by publishing a global project management directory and through the use of Internet by which various contacts could be naturally made between individuals.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

PROMAT (Korean Institute of Project Management and Technology) is made up of 709 individual professionals, 113 students, and 61 corporate members. Although the large number of corporate members is in the engineering/construction sector, software, consultants, manufacturing, research and development, utilities are also represented.

PROMAT was founded in 1991 as the only non-profit organization for project management in Korea.

The organization's goal is to "promote national project management technical capabilities and to foster international technology exchange in the area of project management."

Members participate in annual technical symposia, training courses, quarterly breakfast meetings and special presentations, and receive a quarterly magazine and other technical papers and publications.

PROMAT is a member society of ICEC (International Cost Engineering Council) and has also entered into a cooperation agreement with PMI of USA, SOVNET of Russia and CEPM of India.

Experience, Cooperation and the Future

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

PROMAT has maintained close relations with government: Ministry of Science and Technology, Ministry of Trade Industry and Energy, Ministry of Construction and Transportation.

Especially, PROMAT is putting its best efforts in collaboration with ministry of Construction and Transportation in establishing the national legislation of project management for the effective application of project management in our country.

PROMAT has provided educational services in cooperation with universities and many professors are involved in our technical committee.

SOUTH KOREA (CERIK)

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

Since the project management profession is in great demand in Korea, it is needed to be a standardized project management profession to meet the market demand. Also, the demand for project management education programs is growing.

What **industries** or types of projects are the main users of modern **project** management in your country or region today?

The project management profession is generally considered to be mainly applied to the construction industry in Korea. The project management profession in the construction industry is extensively growing in Korea.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

The construction industry has the greatest need for better project management. The utility, construction companies and construction-related government agencies offer the greatest opportunities for growth of professional project management in Korea.

How can the **project** management profession be most effectively advanced in your country?

The project management profession can be most effectively advanced by adaptation of national law in Korea. Also, introducing a project management-related educational course in academic institutes such as colleges and universities.

What impact will globally recognized **project** management standards or certification have on **project** management profession in your country?

It will be greatly beneficial to the Korean project management profession if project management standards or a certification program is globally recognized, since the local law will accept it as its common standards in construction area.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

- Add a construction industry dedicated chapter
- Add a standard project management profession educational program
- Add project management qualification program more specifically.

How important will international "Standards" for **project** management be in your country or region? Please comment.

Since Korea has no project management standards, it is crucially important to have international project management profession standards.

Is **project** management certification of interest in your country? What type of **project** management certification?

Extensively growing interest for project management certification in the construction market in Korea.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what objectives?

We have a very positive position on a unified global project management organization. We recommend to categorize the project management profession as its application area, such as PMI specific interest group classification.

How can **project** management associations around the world better communicate and cooperate to advance the **project** management profession?

By establishing a representative committee from the six continental regions (the Americas, Europe, Asia, Africa, Oceania, Antarctic). The membership of the continental representative committee should consist of each regional country.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

CERIK was established in 1994 to help the Korean construction industry to prepare for the 21st century. CERIK has been engaged in numerous activities such as research, educational programs and seminars. These activities, supported by valuable input from academic circles, the industry sector and even the public sector, have contributed to the development of the Korean construction industry. In response to new challenges posed by a radically changing world, CERIK believes it is its mission to play a leading role as a think-tank for the Korean construction industry.

Does your organization have established relations with agencies or departments or your government, or with universities? Please describe.

- Education program of project management profession with University
- Agreement with U.S. Construction Industry Institute (CII)
- Agreement with Center for Integrated Facility Engineering (CIFE) sponsored by Stanford University
- Agreement with Japanese Research Institute of Construction and Economy
- Member of PROMAT (Korea Project Management Technology Institute)

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KUWAIT

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

The project management profession is growing in Kuwait as compared to its neighbors. It was introduced in the early 1980s, and since then there is more awareness in Kuwait that project management is an option to manage projects.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

Large scale building construction projects and **petrochemical/oil** sector projects.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

- Non-building type construction projects (such as highways, pipelines, etc.)
- Medium scale construction projects
- Utilities projects
- Environmental projects.

Industries or organizations that offer the greatest opportunities for growth of professional project management in Kuwait are the **oil/refineries** sector and the construction sector.

The reasons are: there is precedence or track records for these types of projects, in which one can witness the effect of project management on managing projects. Also, Kuwait is an oil state, and it is expected that the oil industry will last and improve for many decades to come.

How can the **project** management profession be most effectively advanced in your country?

- By government embracing project management as a profession, since government is the largest user of modern project management.
- By continuing project management training to create awareness.
- By education in project management through universities and colleges.

What **impact** will globally recognized **project** management **standards** or certification have on the **project** management profession in your country?

There will be some impact on globally recognized project management standards or certification on the project management profession in Kuwait. However, Kuwait is so much attached to what is surrounding it. Therefore, it is suggested that these standards be adopted by countries like Saudi Arabia and Egypt so that it may carry the maximum impact on Kuwait.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The following should be contained in a global project management body of knowledge.

- Unified terminology or common language, for example multipackages and fast track vs. phased construction
- Political risk management
- International or multicultural aspects
- Technology transfer of project management to undeveloped countries.

How important will international "Standards" for project management be in your country or region? Please comment.

It will be important to have international standards for project management because:

- International firms bring in different methods and procedures to manage projects and the only last for the duration of the project.
- It will upgrade the understanding of project management as a profession to many who still do not know the concept of project management as a profession.

Is **project** management certification of interest in your country? What **type of project** management certification?

Currently project management certification is not known and recognized in Kuwait. However, it can be of interest if people know about it and its importance.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

It will be a good thing to spread the concept of project management through a unified global project management association. I do support such an organization and would like to discuss further procedures on the way to organize such an organization.

How can project management associations around the world better communicate and cooperate to advance the **project** management profession?

No comment.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

I work full time with the Department of Civil Engineering, the College of Engineering and Petroleum, Kuwait University. The current activities are teaching project management courses, research and consultation in project management.

Does your organization have established relations with agencies or departments of your government, or with **universities**?

Our organization has a well established relationship with agencies of Kuwait government through its unit the "Office of Consultation and Career Development." This unit provides the Kuwait community with consultation services and offers different training programs.

MALAYSIA

OVERVIEW

In an increasingly harsh and competitive climate, businesses must be innovative enough to look beyond the realm of traditional, or tried and proven, practices to discover and assimilate more effective management systems. New and unique problems are intensifying not only in numbers but also in complexity. These call for pioneering and creative, but appropriate, approaches for decision-making purposes.

Many organizations have realized the need for such radical measures. These organizations have recognized the failure of general management with problems of a contemporary nature and a number of them have turned towards project management or projectizing their business processes in the hope of finding solutions to their predicaments. In fact, project management has been extolled as today's answer to the complex problems of management and organization in general. It has even taken on a trendy status. It is now time to examine the applicability of this philosophy of management in the Malaysian context.

OBJECTNES OF PAPER

The principal objective of this document is to present the rationale for establishing a Malaysian chapter of the Project Management Institute (PMI). Beginning with an overview of the concepts inherent in project management and the reasons for the growing popularity of project management, the paper will illustrate the present status of development in project management in developed countries before speculating on the impact that it could have in the overall objectives of Malaysia in achieving developed status by the year 2020. It will be further argued that the absence of a governing body to nurture this philosophy of management and the lack of an adequate infrastructure in Malaysia are serious deterrents in the effective assimilation of best practice in project management in the nation. It will also be contended that with a clearly defined strategy and course of action, the Malaysian chapter can play a leading role in promoting, establishing and enhancing project management expertise not only in the country but also in the region.

THE NATURE OF PROJECT MANAGEMENT

MERITS OF PROJECT MANAGEMENT

The real merit of project management perhaps lies in its advantageous features of goal-directedness, better lateral networking, more integration among societal units, the orderly use of resources and disciplining the user to derive a logical sequence for work to be carried out. Even the classical approach in project management, where emphasis on the three objectives of time, cost and quality (or performance), has been emulated in a number of other management areas, such as Total Quality Management. Although analytical and algorithmic techniques in project management, such as optimum resource utilization and the identification of critical work (critical path method), may have been developed in the 1950s, they are just as applicable today. These techniques help project personnel to isolate and focus on essential work, and together with more modern methods, such as the heuristical approach found in resource leveling, project management methodology offers a refreshing approach in deriving and examining alternatives to managerial problems. Past experience has actually indicated that these techniques, with the help of computerized tools, serve to ensure that projects are completed within planned schedules and budgets.

But it is the contemporary nature of the features within project management that have made it more appealing to organizations intent on seeking innovative approaches to tackling their complex problems. For example, as a more integrative approach in management, project management addresses the issue of globalization and the acknowledgment that business processes in the modern world demand effective interaction among different parties with vested interests.

OTHER CHARACTERISTICS OF PROJECT MANAGEMENT

The main characteristic in project management that distinguishes from other management techniques is based on the premise that every project is unique (or non-repetitive) and has a **pre-determined** life span. The life span, or the Project Life Cycle (as referred to in project management terminology) calls for a different set of managerial action in each phase of the life cycle, from concept to completion. Consequently, this requires definitive management techniques for designing, planning and controlling and even terminating the project. While these techniques may differ from project to project, the approach emphasises addressing and fulfilling the client's needs, acknowledging each client has a different set of needs. This is contrary to traditional practice in general management which focuses on continuity, consistency and uniformity. But conventional management techniques have always been more suitable for mass or assembly line production.

THE TREND TOWARDS PROJECT MANAGEMENT

As stated earlier, a number of organizations have realized the need for radical changes in the manner in which their business processes are conducted and have attempted to adopt project management as the means for instituting progressive transformations and even for reengineering their processes. In more recent times, the urgency for conforming to the new business environment has been due to:

- Realignment of global business and economic forces

The new business environment has brought about a rethinking process among corporations intending to survive, and perhaps even prosper, in these turbulent times. But to compete with the new economic forces, a shorter product life cycle, more efficient utilization of scarce resources, the embedding of high levels of quality in all processes and a customer-focused approach are essential parameters that organizations must conform to. These parameters are, in fact, all representative of prerequisites in the project management approach.

- Downsizing and flattening

Major shrinkages of work forces and the elimination of many levels of bureaucracy are typical means by which organizations are driving to be more cost effective. Many of these organizations are rethinking their business processes so that task or function orientated processes are being replaced by product orientated processes, where a specific group is responsible for a **product** or series of related products. Such group work has even led to the development of groupware (or software directed at helping a group work together). But such behavioural principals are self-evident in project team work and were developed long before management **gurus** began to promote their usefulness.

- Multi-disciplinary approach

Solutions to social and technological problems have become more complex. This has brought about a recognition that a multi-disciplinary approach is needed to tap the differing but specialized expertise of various **people** or societal units. Consequently, bringing together different people with diverse knowledge and skills to develop and implement effective and integrative solutions requires a teamwork approach that is characterized in project management.

There may be a multitude of reasons for the increasing popularity of project management but it can be safely assumed two factors have offered the impetus in its growth:

- the advent of pertinent information systems capable of addressing masses of data with a technology that has seen a phenomenal increase in **performance** and reliability with

unprecedented decreasing costs. These systems have made it possible for virtually anyone to utilize the analytical or algorithmic techniques that are inherent in the original project management concepts (such as the Critical Path Method). For long this had been the preserve of the main frame and systems analysts, but desk top computing altered that scenario and made it affordable for virtually anyone remotely interested in planning a project.

- the acceptance of project management as a discipline and as a profession was the other stimulus that practitioners, writers and academicians had been waiting for. Their work on behavioral and organizational theories relating to project management has brought about a maturity that was somewhat lacking in the early days of CPM and PERT. More significantly, it has brought about the establishment of professional institutes geared towards the development of this discipline and universities responding to it by offering graduate programs and other practical courses.

THE NEED FOR ADVISORY SERVICES

These developments have finally resulted in many organizations acknowledging the contemporary nature of project management techniques in their business processes. However, this new philosophy of management is relatively new and a number of organizations have had to seek external help in determining the applicability and inculcating project management in their processes. While there are a few consultancy organizations offering specific expertise within the wide arena of project management, very few can counsel these organizations on all aspects of project management. Herein lies the principal rationale for a professional body undertaking to provide or coordinate the different services required in an integrated manner.

PROFESSIONAL PROJECT MANAGEMENT BODIES AND THEIR ROLES

RECOGNIZED PROFESSIONAL BODIES

As stated earlier, there are a number of institutions purporting to promote project management. These include academic establishments offering programs featuring project management, business enterprises selling ready made or customized solutions and non-profit orientated institutions dedicated to advancing the methodologies inherent in this area. The latter represent professional bodies that have sought to establish project management as a recognized discipline. Two institutions dominate the scene — Project Management Institute (PMI) in the United States and Association of Project Managers (APM) in the United Kingdom. There are other organizations that share the same objectives as these professional bodies but they serve either national interests or other specific interests. The Major Project Association, for example, is characterized by corporations that are more concerned with large projects. None of these have a membership as extensive as PMI and APM.

THE PROJECT MANAGEMENT INSTITUTE

Formed in 1969, PMI is a non-profit organization that has nearly 27,000 members in the USA and other chapters in the world. Members come from a number of sectors — engineering, aerospace, utilities, financial services, telecommunication, construction, pharmaceutical, automotive, information systems, etc. PMI has declared its intent as "...dedicated to advancing the state-of-the art in the management of projects." More recently, this dedication has been articulated in a statement of PMI's vision:

- To be the leading recognized professional and technical association in advancing the state of program and project management, and
To be achieved through the development and dissemination of the theory and practice of effective management of resources in reaching project goals.

The Institute's strategy is multi-pronged. It has long since embarked on a comprehensive program to establish itself as the main professional body for all project management professionals through a series of activities that encompass setting standards, deriving recommended practice, organizing symposiums and seminars, publishing material in project management, setting a code of ethics and even embarking on a public relations exercise on marketing its services.

But perhaps its most significant role is in establishing a formalized approach to professionalism through:

- **PMBOK**

The Project Management Body of Knowledge (PMBOK) represents the outcome of years of work in **identifying** the complete spectrum of project management, ranging from current practice to advanced research and development. Reviewed and updated continuously, the PMBOK depicts not only the defacto standards in project management, but also serves as the fundamental knowledge base of project management. In its latest form, a three-dimensional framework has been applied to integrate project management functions with project elements and the project life cycle — this illustrates the direction and the extent of the work carried out by the institute in developing a comprehensive body of knowledge

- **Certification program**

In attempt to create a group of certified project management professionals, the Institute began a certification program in 1984. To qualify for certification, an individual must demonstrate long term commitment to project management and pass an examination set by the Institute. Their program has won acclaim and recognition by a number of organizations including such corporate giants as AT&T and Citibank. The PMI program has ensured that these organizations have sufficiently high calibre professionals who can implement strategies based on project management.

As a non-profit motivated organization, PMI relies on other private and academic organizations to complement its objectives. For example, preparatory modules on the certification programs are carried out by private educational establishments. A number of universities use the PMBOK, at least indirectly, to structure their subjects, modules and graduate programs in project management. While PMI may not have legislative or other powers to enforce standards, there is ample evidence that many organizations in the USA have acknowledged the Institute's role and contribution.

OTHER PROFESSIONAL BODIES

The Association of Project Managers (APM) represents the UK equivalent of PMI. Although it does not have the membership size of PMI, it does represent a **formidable** organization as part of Internet. Internet comprises similar bodies in other countries, mainly European ones. In many respects, APM has similar objectives as PMI, but does not seem to play such a positive or direct role as the latter. For example, it is only recently that the APM has recognized the need to establish a Body of Knowledge but is yet to complete the work. It is of interest to note that PMI has recently established a Chapter in the UK.

As stated earlier, a growing number of institutes of higher learning have begun to incorporate project management in their curriculum. In addition to specific modules and subjects at undergraduate levels, a number of them have established organizations running short-duration courses on various techniques in project management and other programs based on the PMI certification exercise.

PROJECT MANAGEMENT IN MALAYSIA

AN OVERVIEW

As with other nations, project management has long been practised in Malaysia as evidenced by some of the historical monuments. The construction of these structures may demonstrate some features in project management, such as uniqueness and the use of teamwork and other temporary re-

sources to complete them. But modern projects require completely different social and technological solutions and the project management approach needed here demands the utilization of a project management methodology that is continually being updated. If this new professionalism can bring about a more effective approach to the management of projects, then the projects scenario in Malaysia must be examined to determine the extent of its usage. And if the usage of contemporary techniques in project management is inadequate (as inferred in earlier sections of this document), then the reasons for it must be identified before recommending remedial action.

THE PRESENT PROJECTS SCENARIO

A striking feature of projects in Malaysia is the size of them in terms of cost and scope of work. The Bakun hydroelectric dam at an estimated cost of RM 15 billion and expected output of 2,400 Megawatts is the biggest project at present. The PETRONAS group's capital investment over the next five years is expected to be more than RM 20 billion. But then there are a number of other mega projects such as the Kuala Lumpur City Centre and the new KL International Airport. These in fact rank among the largest projects in the world. The long list of projects planned both by government and private agencies to develop the infrastructure of the country is reflective, not only of the economic boom, but the nation's aspirations to reach developed status by the year 2020. With a possible commitment of over RM 50 billion in terms of local and foreign investments by the year 2000, it is essential that project financial management techniques such as capital budgeting, capital rationing and cost control are strictly applied by all stakeholders within the projects environment.

An additional distinction between these projects and others is the urgency in completing the projects within specified durations. For example, the main contractor for the Bakun project has stated that generation of electricity will begin by the year 2000, and the first phase of the KLIA is expected to be completed in time for the Commonwealth Games (in 1998). To realize such targets, an essential precondition will be the utilization of fast-tracking and other project management techniques that will help to reduce the duration of these projects to a minimum.

It is perhaps the disparity between the availability of resources and the corresponding demand that will be interpreted as the biggest obstacle in implementing these projects. This is especially true with technical manpower resources and needs to be addressed through some of the more sophisticated techniques in project management, such as resource leveling. But even more pressing is the need for an increased number of professionally qualified project managers and other project personnel who will be able to manage these projects from concept to completion and also ensure that their time, cost quality and other objectives are achieved. PETRONAS, for example, will require 50,000 trained project personnel over the next five years. While PETRONAS has an excellent record with its deliverables, there is ample anecdotal evidence of many other organizations having exceeded their project budgets and planned completion dates. The margins by which these organizations have overrun their original cost and time targets have caused considerable concern but it is conceivable that their problems may have been alleviated if they had an adequate manpower resources, well trained in the principals of effect project management practice.

THE PRACTICE OF PROJECT MANAGEMENT IN MALAYSIA

A cursory examination of various organizations in Malaysia bears out sufficient evidence that modern project management techniques are not in popular use. However, a meager number of the larger enterprises in the construction, oil and gas, petroleum and telecommunication related industries have implemented standardized procedures for project planning and control. The application of computerized Project Management Information Systems (PMIS) feature prominently in them. In addition, their hierarchical designs exhibit task forces and matrices. This is probably because their work has always demanded a project approach. PETRONAS is one of these few exceptions — having long since adopted a more consistent project management approach, it has always demonstrated

a propensity to complete its projects within time and cost. This is quite remarkable, considering the size, cost and complexity of the projects.

It is also possible that inculcation of project management practice has been a direct impact of foreign parties, in the form of partners, consultants or owners. A case in point is **AT&T GIS** which not only subscribes to the PMI approach but also offers its Global Project Management service to its clients. Similarly, the oil and gas industry has a number of participants who have adopted the PMI certification program to increase their core number of project personnel. Telekom Malaysia is another exception. This telecommunication giant has embarked on an extensive exercise to design, implement, monitor and enhance a Total Project Management Solution. With the help of local and foreign consultants, it is reengineering the approach used in managing its multi-billion dollar development program through the implementation of a comprehensive methodology, training and integrated PMIS.

But as implied in this document, such usage of professional project management techniques and systems is limited to a few large organizations. This could be due to a number of reasons. For example, conservative organizations are reluctant to assume new measures and practices because of the risks involved. But it is more probable that these organizations are unaware of the real potential inherent in project management. Although no overall studies have been conducted in this area, a recent survey on the use of PMIS in the construction industry offers an insight. Preliminary interviews conducted during the study revealed that a number of respondents believed that project management consisted simply of analytical methods such as the Critical Path Method. Most were unaware of the strategic implications of this philosophy of management. While the study examined only organizations in the construction industry, such a limited understanding of project management is probably symptomatic of most organizations in other industries, too.

A paradoxical situation prevails in Malaysia. Telekom Malaysia with its innovative approach represents one extreme whereas at the other limit are the rest (and most) of the organizations that seem completely unfamiliar with how project management has developed over the last two decades.

PREREQUISITES FOR THE ACCEPTANCE OF PROJECT MANAGEMENT

There may be a number of quick solutions to overcome the lack of awareness among governmental and business enterprises. But having resolved this perception problem, it is just as imperative that there is a formal mechanism to sustain the assimilation of project management in these organizations. It is also essential that these organizations continue to develop enhanced practices in project management with the guidance of a knowledgeable authority. This suggests the establishment of some form of organizational infrastructure and a centralized body that will accommodate a number of roles:

- Training Role — To disseminate knowledge to a large number of parties.
- Advisory Role — To offer counseling services in evaluating and implementing practices.
- Custodial Role — To ensure practices do not contradict established standards.
- Development Role — To develop enhanced localized practices in project management.

The initial step in establishing a professional body has already been taken by forming the Malaysian chapter of the Project Management Institute. It is now necessary to examine the means by which this body and other organizations can work together to promote the use of contemporary project management techniques in the nation.

THE MALAYSIAN CHAPTER

EARLY HISTORY

The Malaysian chapter of PMI was formed in July 1994 through the enthusiasm of a small but dedicated group of project professionals from PETRONAS, AT&T, GIS, MARA Institute of Technology and other institutions. The group believed in the need for setting up a forum for networking project

personnel for the purpose of pursuing the collective objective of advancing the profession of project management. Affiliating with PMI in the USA also offered a number of possibilities, the main being transferring the expertise developed over decades by the Institute to the local arena.

From the initial discussion among members, it was quite evident that there was a great deal that the chapter and the Institute could offer toward the development of project management professionals in the country.

OBJECTIVES AND ROLES OF THE MALAYSIAN CHAPTER

Education and Training. This is the most significant task of the Malaysian chapter. Beginning by instilling an awareness program in governmental and private organizations, the chapter needs to build on the PMI Certification Program to ensure all parties are given the opportunity to pursue the path of professionalism. A subsequent objective of the Malaysian chapter should focus on enhancing the Certification Program to an advanced professional qualification that reflects the practical aspects of project management and yet encourages the intellect few to pursue a research and development orientated career.

As expressed earlier, the strategy to increase awareness must be directed at two categories of organizations:

- A group that is unaware of the potential project management
- A group that acknowledges the use of project management but is unable to develop existing practices because of a lack of expertise or adequate resources.

A campaign to foster recognition of project management as an alternative to traditional general management must typically include seminars, symposiums and roadshows that carry the theme of the advantages and benefits of this philosophy of management. Exposure to the tools that are available, more specifically, computerized tools, can be brought about by exhibitions sponsored by relevant software vendors. However, these events must be complemented by more formal training programs to pursue the objective of ensuring both groups eventually learn to appreciate the value of project management

At present, the Malaysian public's inclination to acquire professional qualifications can be accommodated through the PMP Certification Program. The Certification Program is a tested and proven approach. The success it has achieved in the United States and elsewhere can be repeated in Malaysia. In fact, the Malaysian chapter has already begun work in this direction. It recently became the region's center for the certification program and has also organized PMI-based training programs with the help of an accredited US based educational institute. The training program was geared to prepare participants for the PMP examinations. Organized by Permata in April, it was well attended by participants from Petronas, Telekom Malaysia and other organizations.

The next phase will involve the Malaysian chapter equipping itself with adequate resources to conduct these educational courses. This can be brought about through a "Training the Trainers" exercise conducted with the help of established educational institutes in the US and also in Malaysia. At this stage, essential physical facilities for the PMP certification program can be located at PERMATA. In addition to playing a major role in setting up the Malaysian chapter, PERMATA has a modern infrastructure and other capabilities. It has the potential of emulating ESI in the USA - ESI is one of the major recognized centers for PMP and other PMI related training programs.

Later, the educational strategy should include post graduate programs that represent extensions of the PMP certification program. At present there are a number of American, Canadian and British universities that offer masters programs in project management. While twinning programs will facilitate the implementation of these courses, it is also necessary that the Malaysian chapter establish such programs with a curriculum reflecting a high local content. This would also help in directing research in this area. This will entail the participation of local universities. By this time, the chapter should have its own physical facilities, and even a campus.

Standards setting

One of the prime reasons for PMI to draw up the PMBOK was the need to establish standards for all industries. The Malaysian chapter must build on this expertise and experience to draw up its own standards in project management in general, and in project management practice in more specific terms. Much of this can be derived from the PMBOK, but local practices, preferences and policies must be incorporated. These standards will help in the design of the project management programs, seminars and conferences that will be organized by the chapter.

But even more significant is the need for some standards to be established for the purposes of planning and reporting progress, especially in large projects. The problem of late completion of projects and budgets being exceeded is a common feature in projects in Malaysia. While it is virtually impossible to ascertain if projects can be completed exactly within the stipulated duration and cost constraints, systematic monitoring will highlight such problems before it becomes too late for remedial action to be taken. But simply establishing these planning and monitoring standards is inadequate — the means of enforcing them on contractors, subcontractors, vendors, consultants and other parties must be realized.

Counseling

The third role of the chapter encompasses advisory services. Rather than compete with project management consultancy organizations, the chapter should act as an independent body offering its services to advise on matters pertaining to project management. For example, it could work together with governmental agencies on drafting contract specifications that detail how project management techniques should be used for planning and monitoring progress. This will indirectly compel all parties involved in projects to utilize the standardized planning and progress monitoring procedures.

Again with the help of the relevant authorities, the chapter can identify means of increasing professionalism within the government itself. The government probably represents the biggest potential user of project management. This observation is elicited from the large number of on-going governmental projects and the fact that a sizeable number of agencies and personnel are involved directly and indirectly in managing projects. Their work involves not only identifying and planning projects, but also monitoring them to ensure these projects are completed within the time stipulated, the budgeted cost and quality (or performance) specifications. If these agencies demonstrate a serious attitude towards implementing professional project management practice, they will, in fact, set the precedence for other private organizations.

With other organizations, the Counseling Unit will direct its efforts to simply examining an organization's project management practice needs, when requested. The Unit will identify the strategy and preliminary action to be taken by the organization. For more detailed work, the Unit will be in a position to recommend Consultancy organizations from a directory (of such organizations) that it would maintain and update regularly.

CONCLUSION

A hallmark of today's business environment is its chaotic nature. The chaos is rooted in unprecedented rates of change, high levels of complexity and a competitive climate. These factors and the emergence of professional customers have forced organizations to be innovative enough to seek, customize and assimilate solutions that can bring about radical changes from possibly, antiquated means of conducting business. A number of organizations are turning to project management. However, Malaysian organizations have been slow to respond. This is reflected in the criticism that is often levied on contractors of projects, both large and small, who have failed to deliver their products within the time, cost and quality objectives. Immediate measures are required to overcome these

symptomatic manifestations of inadequate management practice and equip the nation with the expertise and resources essential for gearing it towards the goals of 2020.

The recurring argument in this paper has been the need to acknowledge modern project management practice as the means to address the ailments evident in the present projects scenario and the establishment of a professional body to govern the development of this philosophy of management in Malaysia. The Malaysian chapter has a significant role in being the change master for promoting, implementing and developing project management in this nation. But by embarking on such a comprehensive program, it is also contended that the body has the potential to evolve into a respected center of excellence in this region.

MEXICO

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

Project management has been practiced for many years in Mexico, but without a coherent and comprehensive body of knowledge of its own. Project management is associated with some jobs or positions and treated as an application of general **management**. Project management has been practiced almost wholly within government and state enterprises. Privatization and free trade are now fostering the development of project management as a professional service to owners and project sponsors. Before that happens, however, they have to hear a convincing answer to the question "Why Project Management?"

What industries or types of **projects** are the main users of modern **project** management in your **country** or region today?

Project management plays a prominent role in construction projects, both during design and construction. This is particularly true in large energy, industrial and infrastructure projects. Telecommunication is an expanding field of application.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Mega projects and large construction projects have the greatest need for more or better project management, due to the large commitment of funds and the risks involved. EPC and BOT projects are increasing both in number and size, especially in energy and public sectors; they are most sensitive to high quality project management.

How can the project management profession be most effectively advanced in your country?

The greatest opportunities for the advancement of the project management profession are in education and training. Foremost, owners and potential clients need to be aware of the benefits of good project management and the consequences of seat-of-the-pants project management. A project management culture has to be built. The active presence of PMI is judged to have a great impact.

What **impact** will globally recognized **project** management standards or certification have on the **project** management profession in your country?

Project management standards set the rules for all participants and establish a common understanding. Globally recognized certification provides credibility to the service provider and assurance to the client. It is a passport to enter the global market. However, in our country the impact of standards and certification will be felt only when project management is duly recognized and its services widely demanded.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

The global PMBOK should be largely based in the present PMI version, enriched by the lessons learned from multinational projects and contributions by other project management associations. We suggest including sections on environmental requirements, as applicable in different countries, ISO Quality System for projects, prevailing project management practices in different parts or regions of the world and critical factors for project management development.

How important will international "Standards" for project management be in your country or region? Please comment.

International standards for project management are important when services are exported or imported from one country to another and in transnational projects, such as telecommunication. Care must be taken to assure that international standards are compatible with local codes and accepted practices.

Is project management certification of interest in your country? What type of project management certification?

Today, project management certification has little value in Mexico. Some transnational companies are promoting this type of certification. For the certificate holder, it may be a key to higher positions and responsibilities. PMI Mexico Chapter has the responsibility of extending the practice of professional project management and thus making certification more valuable to incumbents.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Globally recognized project management standards and certification are based on the premise of some kind of international organization. Probably, a federation (Similar to FIDIC) of national or regional project management organizations would be the best prospect. In Mexico, an international project management organization has very little priority, since project management is in the developmental stage. Our association with PMI is vital at this point in time.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Better communications mean shared experiences, practices and trends. An international organization would act as a catalyst for the communication process. Information technology should play a prominent role.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

On December 9, 1995 a meeting was organized under the auspices of the National Chamber of Consulting Firms, and it was decided to form a PMI Mexico chapter. An application package was sent to Upper Darby. The kick-off meeting was held on February 29, 1996. The PMI charter was signed in July 1996.

The vision of the Mexico chapter is to be recognized in this country as a leading professional association serving the business and education communities by promoting the disciplines and practices of project management. Its mission is to be a forum for project management professionals to network

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and share knowledge and experiences and a medium for extending and disseminating the PMBOK and promoting certification at the international level to recognize the experts in these disciplines.

The Mexico chapter has now (July 1996) around 50 members.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

The PMI Mexico chapter has established relations with the National Chamber of Consulting Firms, The Society for Cost, Economic and Finance Engineering, The University of Yucatan and the Instituto Politecnico Nacional. We are planning to establish other fruitful relations, mainly in the area of education and training.

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PMI Mexico chapter has the following contacts:

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NEW ZEALAND

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management is definitely growing within New Zealand as a profession. The construction industry has a history of major projects (hydroelectric dams, geothermal power stations, oil and gas refineries, etc.). These projects tended to require the importation of skills to New Zealand, resulting in a strong contingent of foreign-qualified project managers. With their historical background the construction/engineering project managers are less open to change and more critical of attempts to standardize project management.

The IT industry is waking to the need for project management, and there has been a gradual industry recognition that project management is more than time and cost control. The project managers involved in the industry are recognizing, with greater speed and enthusiasm than their management, the need to increase skills and develop greater depth, and carry a general excitement within our organization.

Commercial project management conferences, seminars and courses are becoming more readily available. The New Zealand Qualifications Authority is working through a set of guidelines for under- and postgraduate project management courses.

New Zealand can be described as a nation wishing project management to happen, but not yet possessing a clear direction.

What industries or types of projects are the main users of modern project management in your country or region today?

Main industry users of project management include:

- Engineering/construction
- Information technology/communications
- Government works/road construction
- Energy.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Information technology is the industry most in need of project management, and the most open to it. However, it is fair to say that all the industries would benefit because there is a diversity of knowledge, skills and expectations among all groups.

Organizations that are best placed to develop project management within New Zealand are:

- PMINZC—the only independent project management organization in the country
- Universities/Technical Institutes—a number of them are offering undergraduate and postgraduate courses, generally based on overseas courses (English or Australian)
- NZQA—Government qualifications authority responsible for establishing skills and knowledge standards, currently trying to do some catch-up on the industry.

How can the project management profession be most effectively advanced in your country?

By establishment of a recognized and neutral institution that establishes and publishes standards for project management method and practice. By introduction of a formal certification process that is regarded as worthy by industry in a similar light to professional certifications in law, accountancy, etc. These have started with the establishment of PMINZC.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Global standards would provide the stake in the ground to focus on. Currently the PMI PMBOK is accepted by our organization and is therefore the "accepted standard." However, with European, English and Australian influences featuring strongly in New Zealand project management there is a need to demonstrate international flavor, and this is seen as limited in the PMI PMBOK, which has a U.S. flavor.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

PMI's PMBOK is a good start for a generalized body of knowledge. It would be beneficial to also include a technical section that covers:

- Industry-based practices: Outline specialist project management methods and practices by industry. This would raise general awareness of specific industry issues and practices to all project managers and enable cross-fertilization of ideas.
- Geography-based practices: If practices are utilized more strongly in a particular continent, nation or region, then the area should be identified. Examples include procurement methods with U.S. government acquisitions, which are of little direct relevance outside the United States but still add value through broadening global understanding of issues faced and approaches used.
- International glossary: Terms and meanings as they are used around the world, with annotation identifying region where term is used when it is restricted in its geographical use. This would assist professionals as the swing toward globally mobile project managers becomes more pronounced.

How important will international "Standards" for project management be in your country or region? Please comment.

Any standards would be important in New Zealand, and this is being focused on. Ideally, the standards should be as international as possible to:

- Increase general acceptance of the standard
- Cater to the international mix in the profession within New Zealand
- Assure greater depth and applicability of the knowledge base that forms the standard
- Provide a "common language" that facilitates easier interchange of ideas.

Is project management certification of interest in your country? What type of project management certification?

It is of moderate but growing interest. The PMI Project Management Professional (PMP) certification is the only program offered, and is seen as adequate by our organization. The same approach, with increased international flavor, would be a positive enhancement.

Another possible enhancement would be to introduce grades, with the current PMP (or equivalent) as the introductory grade. Higher grades would be based on increased depth and industry-specific knowledge. It is recognized that this would be a tall order to meet effectively, and may best be

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left to the universities and technical institutions, with input from project management organizations. Increased emphasis on competency-based certification would be beneficial.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

It is strongly supported by the New Zealand PMINZC executive. The suggested organizational structure is:

- The decision making Executive should consist of a quorum of, say, 12 members.
- No more than one member from any project management organization (with the same organization in different countries being treated separately) should be on the Executive.
- The 3 to 5 largest international project management bodies should have permanent seats, with the remainder being provided by other organizations on a rotational basis.
- There should be a mechanism to assure that regional diversity and representation is maintained on the Executive.
- All project management organizations in a region would make submissions through their "regional" representative, irrespective of the organization from which he or she is from.

Objectives that the organization represents should include:

- Be the international professional and technical association in the field of project and program management, accepted and supported by the diverse organizations throughout the world.
- Achieve recognition through development and dissemination of the theory and practice of effective management of resources in reaching project goals.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

- Advertise conferences of other organizations.
- Provide project management conferences that are developed across multiple project management bodies.
- Interchange articles/news, etc., between various publications.
- Establish a "What's Happening ..." column in publications that identifies developments made in other project management organizations, and in terms of relationship building and joint ventures.
- Develop an electronic linkage between project managers and project management organizations.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Formation activities for the Project Management Institute New Zealand Chapter (PMINZC) commenced mid-1993. We are a chapter of the Project Management Institute and in March 1994 PMI formally issued our charter. Since then our membership has grown from 29 to 100. We expect this to dramatically increase over the next few months, as we are offering our first annual conference and this is gaining a great deal of national interest among various industries.

Our executive consists of 7 elected, voluntary members who manage their portfolios with the assistance of committees drawn from the membership. Portfolios cover membership, programs, professional development, and public relations.

Our mission is to promote awareness of PMINZC, develop project management knowledge and skills, foster communications and fellowship between PMINZC members and external organizations having a stake in project management professionalism.

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Major activities include:

- Monthly newsletter, **PM Forum**, sent to all membership and potential members
- Membership lists circulated to membership quarterly (to enable networking)
- Monthly chapter meetings in Auckland Wellington, our two main centers
- Establishment of annual project management conference
- Preparation workshops (once a week for 16 weeks in Auckland and Wellington) prior to each PMP exam
- Offering the PMI PMP exam.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

We are currently establishing relationships with a number of universities and technical institutions. A number of our members are from these institutions and our ability to identify and influence project management course content is increasing. In general, we are still at the early stages, but the network is growing **quickly**. We have just agreed to assist one research study in project management practice being conducted by a technical institute, and hope to continue building on this into the future.

Work has started with the New **Zealand** Qualifications Authority in an effort to influence the skills and knowledge requirements in undergraduate and postgraduate courses offered throughout New **Zealand**.

NIGERIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

The project management profession in Nigeria is considered to be growing. The target membership anticipated for 1996's end is about 75. So far, about 60 people have indicated interest in joining PMI. The major constraint is the need to remit dues in dollars to PMI Headquarters with a weak national currency. However 70 percent of steering committee members have joined PMI in America by paying annual dues to the PMI Executive Office.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

Major industries like telecommunication, **oil/gas** and construction are the main users; modern project management is growing in **computers/software** and utilities presently.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

The greatest need for better project management is in the construction area of application. Oil companies offer the greatest opportunities for growth of professional project management in Nigeria. Nigeria is a mono-product economy and oil contributes 90 percent of the annual revenue.

How can the **project** management profession be most effectively advanced in your country?

Project management can be most effectively advanced in Nigeria by publicizing it among other professions especially organizations and associations that can influence professional managers and business executives.

What **impact** will globally recognized **project** management standards or **certification** have on the **project** management profession in your country?

Globally recognized project management standards or certification will create opportunities for professions to interact and interface between industries and sectors of the economy.

Educational institutions will also require accreditation from PMI and this will promote global recognition.

ISSUES OF COMMON INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

A global Project Management Body of Knowledge (PMBOK) should contain the the experience of different project management organizations worldwide. The global forum will provide opportunity for exchange of information and experience sharing.

How important will international "Standards" for project management be in your country or region? Please comment.

International "standards" for project management will enable different countries to unify tools, techniques and terminologies for project management. Most countries in the West-African subregion already participate in World Bank Financed Projects where procurement practices are similar to Project Management Body of Knowledge (PMBOK).

Is project management certification of interest in your country? What type of project management certification?

PMP designation will enable project management practitioners to offer their expertise to different organizations which require certified project managers to manage their projects.

What is your interest or position on a unified global project management association or organization. If you support such an organization, how should it be organized and for what objectives?

The world has suddenly removed geographical barriers in promoting trade and commerce. A unified global project management association or organization will support these initiatives. The objectives of reaching remote markets and in particular, opening new markets in developing economies like Africa, Eastern Europe, etc. will become much more realize.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Information technology explosion has increased opportunities for countries to exchange ideas quickly and project management organizations have capitalized on these opportunities to increase market share for various products.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

On December 10, 1994, Julius Soares, Sponsor Nigeria Chapter, met with David McClure, PMP, SIG's chair, Design /Procure/Construct to discuss the possibilities of establishing a chapter in Nigeria. Apart from South Africa and Egypt, Nigeria chapter (presently awaiting approval), will be the third chapter in Africa. Five steps out of a six step process have been completed. The final step of the chapter formation process was finalized at the 27th Annual Seminars & Symposium on October 4-10 1996 in Boston, Massachusetts, USA. The minimum number of 25 members exceeded with the submission of 40 membership applications; this number has increased to about 60 presently. Five local organizing committee members joined the sponsor to prepare the chapter application package on July 5, 1995 which was submitted. On the June 27, 1996, a congratulatory letter was received from PMI chapter coordinators to acknowledge the chapters support and dedication. Membership is open to those interested in furthering the purposes for which the institute was founded and to those who are actively engaged in the application, techniques or research of project management principles and techniques. Nigeria Chapter has continued to sponsor activities to meet its goal and objectives.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

PMI POTENTIAL LAGOS NIGERIA CHAPTER: Steering Committee Members 1996-99, President/Founder: J.T. Soares

Julius is a controller, Project Manager Lagos Water Supply (World Bank assisted) program. He has been a member of PMI since 1993, sponsor of PMI Nigeria Chapter and a member of Northern

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California Chapter. He holds a B.Eng. in civil engineering from University of Nigeria Nsukka and post graduate qualification in project management from the University of California at Berkeley. He is an MBA candidate in operation management at the Lagos State University (LASU). PMI Nigeria seeks to establish relations with universities, professional bodies and corporate organizations through seminars and other continuing education programs. Presently, most of the steering committee members are drawn from business schools, universities project management consultants and representatives of public and private sectors of the economy.

CONTACTS

The chapter roster is enclosed to provide names and addresses of members.

The official contact remains

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Vice president: Membership & Marketing; Frank Mbakogu

Frank is a Director of Allied Tropical Consultants Ltd., a consultancy organization providing engineering and architectural design services. He holds a B. Eng. in civil engineering from University of Nigeria Nsukka and a Ph.D from Imperial College London.

Vice President: Professional Development; Kunle Kupoluyi

Kunle is a partner Ove Arup & Patners, a consultancy firm of structural and civil engineering design services. He holds a B. Sc in civil engineering from University of Lagos and an M.S. in structural engineering from Stanford University in Palo Alto, California.

Vice President: Education/Certification; Dade Sadare

Dade is a member, faculty of Lagos Business School. He specializes in the area of computer based systems for project management and management of information systems. He holds a Ph.D, from Kings College, London.

Vice President: Administration/Programs; Bayo Adeola

Bayo is a partner of AOP, a consultancy firm providing engineering and management services. He has conducted project management programs at Lagos Business School. He holds an M. Sc in water engineering from Imperial College, London.

Vice President Finance/Treasurer: Remi Kuteyi (Mrs.)

Remi is a commercial manager with Lagos State Water Corporation. She has a B.Sc degree in Microbiology from the University of Texas, Arlington U.S.A and a MBA in management from Abilene Christian University Dallas, Texas.

Secretary: Hilary Martins

Hilary is a seasoned administrator and a coordinator of Biashara Service Centre, an organization working in collaboration with the George Washington School of Business and Public Administration to organize master's certificate courses in project management, global marketing and international finance. He has a bachelor's degree in political science from University of Ibadan and participated in various project management courses.

Vice President: Public Relations; Sumbo Omotayo (Mrs.)

Sumbo is a lecturer in the Department of General Studies, Federal Polytechnic Haro. She has been teaching communication and language courses in schools of engineering and management since 1992. She holds a Bachelors of Arts degree in English from the University of Ibadan.

Trustee: Victor Teriba

Victor is a manager with a commercial bank in Lagos. He has a B.Sc in political science with a bias in public administration. He has finalized course work for an MBA in marketing at Lagos State University (LASU)

Trustee: Kayode Opeifa

Kayode is a lecturer in the faculty of science, Lagos State University. He has a Master of Science degree in biochemistry from University of Ilorin. He is currently finalizing his course work for an MBA degree from Lagos State University.

NORWAY

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The Norwegian Association of Project Management (NFP) was organized in 1976. Current membership is 600, coming from various parts of Norwegian industries. The main portions of members are related to the oil and gas industry

During these years, the development of project management as a profession has grown fast. Today, several educational institutions offer education within the area of project management and several books have been issued, also by NFE

NFP has arranged a lot of courses and seminars, as well as international congresses in project management, both for ICEC, IPMA and NORNET.

What industries or types of projects are the main users of modern project management in your country or region today?

The oil and gas industries are still the main users of modern project management. It is also expected that the driving force of the development of the project management profession in the future will be within these industries. However, other major projects like the new Oslo Airport, the new national hospital, the new central area railway system and other major projects will be heavy users of modern project management. Also, modern project management is used within the defense.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Even if it is expected that the development of modern project management will be within organizations with major projects, other areas will gradually adopt the ideas. Such areas are the traditional building industry, communication, broadcasting, research, etc. The project in organization form is growing in all areas of industry.

How can the project management profession be most effectively advanced in your country?

The growth of the project management profession depends on the success of project management in the leading industries. It is therefore very important that project management in these industries is made visible. This is done in our organization through seminars and courses.

It is also important that we communicate in the international arena on these matters. Also very important is the support to educational institutions and research institutions in project management.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

NFP supports heavily the development of international standards and certification as we recognize that this will be very important for a further development of project management. Organizations and projects are more and more international, and the development of the European Union (EU) makes it more and more necessary to develop international standards.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

A PMBOK has been developed by IPMA.

How important will international "Standards" for project management be in your country or region? Please comment.

As stated above, NFP regards the development of international standards as very important and necessary to bring project management forward.

Is project management certification of interest in your country? What type of **project** management certification?

NFP has been very active in the development of a common certification body within IPMA. A standard is now recognized and it is expected that the certification system will be implemented soon.

In Norway, a certification system was started a few years ago. NRP is the professional granter of the project management certification.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

NFP will support the organization of a global project management association. Our position is that a global project management association should be organized the same as ICEC: each national project management organization should be a member. The International Project Management Association should be split in regions, one for the Americas, one for Europe, etc. The European National Project Management Associations should then belong to the European region.

On the international level, we should coordinate the development of standards, certification, etc. Further, we should coordinate international congresses and support research within project management.

It is important that the organization structure is light and cost effective.

How can **project** management associations around the world better communicate and cooperate to advance the **project** management profession?

If organized as one international association, a common journal should be issued containing articles and other information about project management. All national associations should communicate through this journal.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

NFP was founded in 1976 and has grown to an association with 600 members. It started off with in the area of oil and gas, and still these industries are the most important contributors to the development of modern project management.

NFP is a member of ICEC and IPMA. We also support an "informal" cooperation within the Nordic countries (**NORNET**).

NFP has through the years arranged a lot of educational courses and seminars. We have also issued several learning books.

International congresses have been arranged for ICEC, IPMA and **NORNET**.

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The main issue for NFP is to get modern project management recognized as a profession and to communicate new ideas within project management to the members.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

NFP has established relations to both governmental and educational bodies. We cooperate with the university of technology and science and the institute of business administration as well as several regional universities. Our learning books are used in several of these institutions.

PS 2000 (Project management 2000) is a research program organized by the university of technology and science. NFP is part of this program.

CONTACTS

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PAKISTAN

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

Project management is growing, but at a slower pace. It has gained recognition by sponsors of large engineering and industrial projects in the private sector as well, besides the public sector.

What industries or types of **projects** are the main **users** of modern **project** management in your country or region today?

Principal users are multinational organizations and those organizations which are advised to use professional project managers by World Bank, CIDA and ADB on projects funded by them. The other users are in the private sector who are engaged in the execution of power projects and projects involving bank loans or syndicate financing.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Public sector development projects, especially in the fields of infrastructure development, including roads, highways, airports, ports, housing, industry, high technology projects and defense.

How can the **project** management profession be most effectively advanced in your country?

More practical involvement of PMI in its country and regional chapter activities and constant support by means of furnishing books, literature and publications at subsidized costs.

What impact will globally recognized project management standards or certification have on the **project** management profession in your country?

It will help the project management professional to emphasize the need for recognition of the project management discipline at a government level.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The present state of PMBOK should be accepted globally. It should be gradually expanded to cover global issues, regionwise. Main issues pertain to standardization of practice, roles of project managers, cultural and economic conditions and computer software.

How important will international "Standards" for **project** management be in your country or region? Please comment.

It will provide a common grid for project managers from different countries operating in Pakistan, and will help the clients to have common parameters for comparing project performance.

Is **project** management certification of interest in your country? What type of **project** management certification?

Yes. All levels would be welcomed.

What is your interest or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

Since this forum has been initiated by PMI USA, it is high time that PMI chapters are taken on a global network to provide an opportunity to its members for exchange of practical knowledge and experience.

How can **project** management associations around the world better communicate and cooperate to advance the **project** management profession?

Firstly, through frequent meetings within the regional spheres. Secondly, the combined experience could then be brought to a global forum to have a better understanding of global issues and their solutions.

YOUR ORGANIZATION

Briefly describe the history, purpose, organizations and activities of the professional **project** management organization you represent.

FTC Management Company (Pvt) Ltd. is an organization owned by II major financial development institutions, commercial and industrial organizations. Being engaged in management of projects on a large scale, it has been the main sponsor of the PMI chapter in Pakistan. It has been able to generate an awareness of the project management discipline and more organizations have opted to join.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes, we have established contact with the Institution of Engineers, Pakistan, which is the largest body of representing engineers in all disciplines. They will be approached for cooperating agreements. We have also established contact with an Engineering College, run by the Pakistan Navy, who are very keen to introduce the project management discipline. Recently, we contacted Dr. Rafi Ahmed Ashrafi, specialist in project management, Department of Civil Engineering, University of Calgary, who has promised to assist PMI Chapter Pakistan in its effort.

PERU

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

The project management profession is in its infancy state in Peru. There are just a handful of registered PMI members.

What industries or types of industries are the main users of modern **project** management in your country or region today?

Most of today's users of modern project management in Peru are the largest engineering and construction firms. There are also some newly developed mining and oil projects where owners are requiring the use of project management techniques.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

The mining and oil industries are the ones which are expected to require more utilization of project management. These are the ones which will offer the greatest opportunities for growth of professional project management in Peru. Obviously, engineering and construction firms will also offer the opportunity of applying project management concepts in the coming years. Another area which will require utilization of project management is the public area because the Peruvian government is making great efforts to modernize its infrastructure.

How can the **project** management profession be most effectively advanced in your country?

By formalizing the PMI chapter and by the collaboration between the PMI chapter and different universities.

What **impact** will globally recognized standards or certification have on the **project** management profession in your country?

It will raise the quality of project managers assigned to projects here in Peru.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

We are very satisfied with the latest version of the PMBOK.

How important will international "**Standards**" for **project** management be in your country or region? Please comment.

Very important. Peru is now facing a rapid development of new projects managed by organizations from all over the world. A common language for communicating and carrying out activities will be provided by applying international standards for project management.

Is **project** management certification of interest in your country? What type of project management certification.

At the moment we are in a phase of spreading information about PMI. We think that in the next 12–18 months there will be a demand for certified project managers who will be managing **internationally-owned** projects based here in Peru.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

In view of the globalization of economies, culture, telecommunications, etc., it will be natural that organizations and institutions become global. The project management profession will not be.

How can project management associations in the world better communicate and cooperate to advance the **project** management profession?

By wide usage of the Internet.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Our organization, the Peru Potential PMI Chapter, started activities in 1995, with the organization of a 12-week seminar on the PMBOK.

The purpose of the Peru Potential PMI Chapter is to increase awareness of project management techniques in our country by the development of activities in this field.

We are in the phase of recruiting PMI members.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Not yet.

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PHILIPPINES

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

"Project management" has been practiced for a long time in the construction industry with the use of PERT-CPM in 1961 — both in private and government jobs. It has grown, but not in the "quality" desired. The lack of disciplined training, lack of proper trainers, the matter of culture and complacent attitudes contribute to the poor development. The other institutions appear to be waking up. Newspaper ads point to project management need in the pharmaceutical — but not in other fields. There also is a growing push — by foreign consultants of international organizations like Asian Development Bank, World Bank involved in infrastructure projects on grant or loan arrangements — to encourage engineers of the local agencies/corporations to train their people in project management.

For the last few years some private companies and government agencies have sent employees for project management training in the US, Malaysia and Singapore. There are project management training sessions scheduled, and with ESI, by a few local companies and government agencies. A few training companies do give project management seminars.

Many here are not aware of project management software like Artemis, Primavera, Research Engineers, Pathfinder and so forth. If they do, only a few companies can afford training in them.

What industry or types of projects are the main users of modern project management in your country or region today?

The construction industry and civil works projects are the main users here — this includes developers, the government agencies involved in infrastructure (energy, power, highway, communications, buildings, etc.), but mostly in the civil engineering field. As mentioned, one sees "Project Manager Needed" in the ads in other fields, but very seldom. Also, when you talk about users, there would be many who practice the project management elements but need better formal training in project management.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Still construction, because the country is experiencing a construction boom. However, various organizations like the NGO practice project management. The field is open here, construction and developments are in all sectors — many projects in many fields: environmental development, new plants of the transportation, automotive and pharmaceutical and other institutions. There are, we believe, many who practice some kind of project management — but not along the discipline of PMI.

How can the project management profession be most effectively advanced in your country?

We still have to go basic. Especially getting the support or training of the executives and middle management and users themselves. We should pinpoint the top including directors to make them realize the value of project management training and the value of choosing the right trained person. Marketing will have to be resorted to. Top rank speakers experienced in the industry they represent would have to do the presentations.

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The top people will have to give the support to project management and not just give lip service by sending employees to train in project management and then not give importance in the application or follow-up.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

More important is the impact of project management, i.e., project management is accepted as a big value — **once** this status is reached, the **recognition** of project management will have a better impact — resulting in a need for a globally **recognized** project management **certification**. **As** projects are everywhere — in many industries, but sad experiences are universally the same. Why? The **answers** are basic:

- Projects that have cost over run
- Delayed
- Quality not met.

Project management will be better accepted by companies or agencies that really place importance on cost, schedule and quality. However, the effort will be deeper as we will have to touch on the culture of the location, attitudes and prevailing corruption.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

I have not seen the new PMBOK Guide, but I would like to see included in the PMBOK some treatment of or references to:

- Time and motion studies
- ISO 9000
- TQM/Fish Diagrams.

How important will international "Standards" for project management be in your country or region? Please comment.

This questions should be related to above. But I would say standards would be important because:

- **Country** is open to international investors/projects
- They would readily accept or prefer the practice of project management at international standards
- Should eventually be sought by countries and regions to be applied in their own projects.

Is project management certification of interest in your county? What type of project management certification?

No, not yet Nobody knows about this or at least very few do, and those interested may not want to take the exam or they, as individuals, cannot afford it In the **future**, only those who are involved in the project **man-**agement practice will appreciate acquiring the certification.

What is your interest or position in a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Need more time to answer this. "Unified and global" are the key words. How long will it last; will there be a continuing interest? Will project management develop like medicine or engineering or after a while only the management concepts in general will develop and people will lose interest?

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Through PM *Network* magazine or similar magazines of other organizations if acceptable

- International annual symposiums.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

When I used to receive Project Management Quarterly back in the 1970s, there seemed to be more articles on construction. But PMI remained in mind. The former sponsor, Mr. Isagani Garcia and I, joined in 1991 to start PMI five years ago. A big disappointment, from a possible 15 members at the start, it declined to three and almost died out. When Mr. Garcia accepted a consultancy job, he asked me to take over, but the spark this time came from the local AT&T group. We contacted and revived the effort. We cannot say too much at this time, as the group still is waiting to be chartered. Response here will have to do with what it is now. All activities are geared to meet conditions of being chartered.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Not yet, we intend to; already briefly brought out in the meetings; with two foremost schools here, considering also the Army of Corp of Engineers and so forth.

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RUSSIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Since the 1930s, development and use of project management methods in Russia have been in line with world project management, but with a lag due to insufficient computerization and absent information technologies. In addition, a significant reason for this situation is a lack of a professional project management organization in the former USSR planned and distributive economy.

The beginning of intensive growth and application of modern project management relates to the end of 1990, when SOVNET—the Russian Association of Project Management—was created. The association quite quickly entered the world community of project management professionals.

Today, we can say that project management in Russia has a considerably developed theoretical and methodological base. At the same time, in the field of practical use, the project management profession in Russia could be characterized as "growing" because there is no significant experience with full project completion utilizing complex, modern project management methods.

What industries or types of projects are the main users of modern project management in your country or region today?

Nowadays in Russia, the main spheres of modern project management application are:

- Gas, oil and fuel and energy industries
- New construction, and reconstruction of housing, civil and industrial buildings and constructions, with a priority on housing
- Information and control systems
- Infrastructure with existing telecommunication and transport systems
- Metallurgy and mining industry
- Aerospace systems
- Agro-industrial complexes and logistics
- Conversion projects.

In addition, project management was used more widely last year in the next spheres:

- Education and training for the market economy
- Development of the financing and credit sphere
- Environment
- Social protection.

The main types of projects are:

- Technical
- Investment
- Innovation
- Organization
- Education.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Due to reforms in Russia, modern project management methods are needed in programs and projects implemented in different branches of industry and production. These projects are connected with the social and economic conversion, as well as with technical upgrading and new technologies.

The greatest possibilities for project management development in Russia today are in the industrial sectors with favorable economic conditions. These opportunities include:

- Fuel and energy facilities
- Fossil fuel industries
- Industries that are related to food production and distribution
- Investment and financial credit spheres

Last time good opportunities were opening for the development and use of project management in the next fields of the professional activity:

- Reengineering enterprises and companies through their adaptation to market economy
- Environment
- Telecommunication and connection.

These spheres are attracting the foreign investments and credits very widely.

How can the project management profession be most effectively advanced in your country?

In the country today, effective promotion is achieved if project management is facilitated by the transition to the market economy, which dismantled the former planned and distributive system. The new economic situation demands a more thorough planning, preparation and implementation of projects with fixed budget and schedule, and for successful evaluation of project results. All this requires full scope project management implementation on a wide scale.

To be recognized as a necessity, the methodology of project management should be implemented in Russia. The following is required:

- Methodology, PMBOK, methods and tools of project management should be created that meet specific features of the transition economy and peculiarities of the country
- Personnel training and qualification
- Wide support and popularization of project management in the mass media
- Legal support
- Encouragement and support of new project management professional organizations and institutions.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

There are two distinct developments in Russia now. First, more and more Russian firms and organizations are joining world economic activity. Second, more and more foreign investors are participating in Russian projects and programs. Both of these processes require the creation of a united language of business communication and culture. In our opinion, modern project management, with acknowledged standards of certification and accreditation, can be a cultural bridge and provide a means of global business communication.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

The global Project Management Body of Knowledge should contain unified elements and a fundamental background developed with an international consensus. In essence, it should be an ac-

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knowledge basis of PMBOK developed in accordance with special features of economies, cultures and traditions of different countries of the world.

In this connection, a global PMBOK should include:

- A worldwide understanding of the project management profession and ethics
- An integrated system of unified terms and definitions and a glossary
- The contents of the unified PMBOK core
- A unified approach to the education and training of project management specialists with differentiation in levels and degrees
- A basic program of personnel and education training
- Unified requirements, programs and procedures for certification of international project managers and specialized project management organizations
- Recommendations for national certification programs
- International standards and methodology recommendations on project management practical application involving invariant and variable components depending on the project's type, fields of use, type of country economy, etc.

How important will international "Standards" for project management be in your country or region? Please comment.

A global PMBOK, along with international project management standards, is of great importance for Russia because it will enable:

- A rapid overcoming of the gap in the development of professionalism and practical application
- An easy integration of Russia into the world economy and the enhancement of efficiency of Russian participation in foreign programs and projects
- An easy integration of the foreign firms and companies into the Russian economy and the other countries of the former USSR and efficient implementation of joint projects.

Is project management certification of interest in your country? What type of project management certification?

Undoubtedly, a certification in project management is of interest in Russia. The certification could include:

- Certification of Russian international project managers under a unified certification program
- Certification of Russian domestic project managers under a unified program taking into account the national requirements.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

We think that global unification of the project management association and organizations is useful, necessary and timely. Our opinion is that such a unification could be done as a Federation of Project Management Associations (FPMA). An FPMA should not have a vertical hierarchy with bureaucratic apparatus but must be headed by a coordinated body that is elected by FPMA members. Elected representation should be for a period of two-to-three years.

The major FPMA objectives are:

- Global development of professionalism in project management and support of its promotion to new countries, regions, and new fields of application
- Arrangement of FPMA members' cooperation in the professional field
- Support of global FPMA network development and involvement of new participants
- Representation of FPMA members in international organizations in the field of project management unification, international standards, education and certification
- Organizing and holding of world forums on project management

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- Coordination of FPMA members' activity, assistance in FPMA members' liaison and communication
- Information servicing of FPMA members and publicity in project management.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

The global promotion of the project management profession should be carried out by associations and organizations under the aegis of FPMA.

Actual problems and tasks of the organization should be resolved in the framework of special programs and projects of FPMA by executive teams of experts.

Financing of these projects and programs must be received from international financial and credit institutions and national organizations upon FPMA application.

YOUR ORGANIZATION

Briefly describe the history purpose, organization and activities of the professional project management organization you represent.

The Russian Association of Project Management (Soviet Association before) was created on October 25, 1990, as a good-will union of project management professionals, and is a public non-profit, professional, international organization acting under the Russian legislation and in accordance with the Statute of Association.

The highest body of the association is the conference which elects the board of the association, president, vice-presidents, CEO and executive committee.

As of September 1, 1996, members of SOVNET are: 69 organizations and 134 persons (among them, experts from the USA, Canada, Holland, Egypt, Vietnam, Ukraine, Byelonissia, Esotria, Lithuania, Moldova, Tadjikistan and Kazakhstan).SOVNET has two chapters...in Samara and St. Petersburg.

The membership in SOVNET is of the following types:

- Corporate — for legal entities; republican, territorial, industrial associations or societies of project management
- Individual — for specialists in project management
- Those experts who have achievements in project management and/or have done great service to the association are awarded the degree of the Honorary Member, with fixed benefits.

The main tasks of the association are:

- Enhancement of project management state-of-the-art
- Forming of a professional project management market in Russia
- Rendering assistance to firms and organizations in defining the most suitable project management methods and tools, as well as support in implementation of the methods
- Creation of a system of project management professional training (education, refresher training and certification)

For these, SOVNET uses the following:

- Information and publishing activity. SOVNET is gaining, analyzing, considering and promoting professional project management information and literature, as well as special publications of the association.
- Scientific activity. This means searching for prospective trends, coordination and concentration of research and development of project management means and methods, arrangement of symposiums, conferences, seminars, meeting exhibitions, etc. The association has also created a unique library of domestic and foreign project management software.

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- Personal training. For **this** the association develops scientific, methodological, educational and certification materials, participates in educational programs for students, refresher courses for experts and program certification.

Involvement in real industrial and social projects, SOVNET has successfully developed concepts of creation and improvement of project management systems for civil construction in the country, in Moscow and in St. Petersburg, for Magnitigirsk Metallurgical combine, and reengineering the design institute GIPROSPECGAS in St. Petersburg, etc.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

SOVNET actively participates in big industrial and social projects, which means that the association has maintained good relations with following departments and organizations:

- The government of Moscow — Departments of Development, Industry and Construction
- The government of St. Petersburg
- The Ministry of Civil Construction of Russia
- The Ministry of Education
- The State Committee of Black Metallurgy
- The Ministry of Fuel and Energy
- The Ministry of Foreign Economic Relations — Tyzhpromexport
- The Ministry of Defense
- RAO GASPROM
- The State Moscow Construction University
- The State St. Petersburg Architecture and Construction University
- The State Polytechnic University of Ecaterinburg
- The State Polytechnic University of Chelynbinsk
- The State Academy of Management, etc.

All these organizations are members of the association and customers of SOVNET consulting services.

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SAUDI ARABIA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

The project management profession has been developed extensively in the Gulf region. Over the past five decades, the region has experienced incredible growth in the infrastructure, process industries, industrial services and communications.

What industries or types of **projects** are the main users of modern **project** management in your country or region today?

Process petroleum, communication and manufacturing industries are the main users of project management in the Gulf regions.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

I would guess that the mining industry, communication and industrial services will require the greatest need for project management since it is beginning to develop in the area. The greatest opportunities are still, however, in the petroleum and chemical industries. Petroleum and chemical related work remains the main revenue generating industry here in the Gulf and continues to attract the greatest interest in capital programs requiring project management.

How can the **project** management profession be most effectively advanced in your country?

Project management professionals can be developed and advanced through university-level programs dedicated to the skills required for project management. In the United States, several technical universities have initiated programs in construction management and programmatic studies such as operations research and other programming skill type cumculums.

Architects are educated to manage entire buildings projects far more effectively than engineering students. Some of the techniques used for architects should be applied to the education of project management professionals.

What **impact** will **globally** recognized **project** management standards or certification have on the **project** management profession in your country?

It would help to dispel the myth that persons with high energy levels limited experience and knowledge can manage projects effectively. It would also provide a minimum set of qualifications and skills for selection of working project managers.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The Body of Knowledge could use a section on cultural approaches and contracting strategies that are used throughout the world. As an example, in the Kingdom, the American approach to contracting with a client is a generally accepted practice. In the U.A.E., Bahrain and other Gulf countries, the British approach using a key consultant is often used. Each approach puts the burden of liability on different parties.

How important will international "Standards" for project management be in your country or region? Please comment.

Over a period of time, they may be recognized. It depends on the enlightenment of the region leaders in the capital project industry.

Is project management certification of interest in your country? What type of project management certification?

Yes, we are getting more inquiries from the chapter members as to when and where will be the next project management professional certification exam. To date, about 30 members advised us of their intent to apply for the December 7, 1996 PMP certification exam.

In 1997, Chapter #57 is **planning** to administer one PMP Certification Exam in Dubai, U.A.E., for March and three PMP Certification Exams in Dheran, Saudi Arabia, for March, June and December, respectively.

What is your interest or position on a unified global management association or organization? If you support such an organization, how should it be organized and for what objectives?

PMI-AGC is supporting this idea, but it is a long way off. First, the need for a project management association must be established, like the Boiler Code — out of need. Until it is apparent that there is a need, the ideas will be hard to push forward.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

People in our business are always interested in case histories of projects to compare contracting philosophies, etc. It would be tremendous if PMI members could document projects, good or bad, for archiving. These case studies would be a source of discussion among the members and other associates as well as **help** prevent reoccurring problems.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

After an initial survey of interest of PMI members in Saudi Arabia and the Arabian Gulf Region in late 1991, Richard Hauptman filed a letter of intent to form the Arabian Gulf Chapter on April 10, 1992. An initial explanatory discussion was held in Al-Khobar on April 28, 1992, among Richard Johnson, Cliff Newcomb and Richard Hauptman to plan formation of the chapter. Following this meeting, a membership campaign was launched featuring both individual contact and mailings.

As a result of this, on August 27, 1992, 16 people met for dinner at the **Meridan Hotel** in Al Khobar, Kingdom of Saudi Arabia, to discuss the formation of a Project Management Institute Chapter in the Arabian Gulf area. It was agreed with a formation of a chapter and interim officers were elected:

- Richard C. Hauptman President
- Saleh A. Al-Yami Vice President
- Edward H. Heard Treasurer
- Mohammed Abdulrahim Secretary
- Mike Roberts Director of Membership

High interest in a gulf chapter was and continues to be apparent and with the second meeting in October of 1992, the membership committee was demonstrating results in increased registrations and attendance at the meetings. Thirty-six **professionals** attended this meeting. Our first speaker Mr. W.A. Wenger, vice president and program manager of John Brown, Inc. spoke of their organiza-

tion and approach to project management. As an indication of corporate support for the prospective chapter, Saudi Aramco sponsored this meeting.

The third meeting in December featured Mr. George Hull of Bechtel, Inc. who first came to Saudi Arabia in the late 1940s. He spoke on the development and construction of Jubail, a planned industrial city which was recently listed in The *Guinness* Book of World Records as the largest public works project ever built.

By December of 1992, we reached the minimum requirements of 25 PMI members building professionalism through project management, and by early 1993, we had 42 PMI members, two-thirds of whom have joined PMI as a direct result of the prospective Arabian Gulf Chapter's organizational efforts.

In keeping with our Gulf-wide intentions, the first meeting of 1993 was held in the State of Bahrain on January 21st and 29 potential and registered members attended. Mr. Abdullah G. Al-Ghanim, senior vice president-engineering and project management, Saudi Aramco, spoke on Aramco's "Quality Improvement Program." The proposed constitution, by-laws and financial plans were presented in final draft form and discussed. An informal meeting was convened in Riyadh in late February 1993, to develop further interest in that area. The gathering was attended by the late membership director, president, eight other current members and seven other interested professionals.

On March 3, 1993, the chapter application was submitted to the Vice President-Region I, Project Management Institute, in Vancouver, Canada, for the proposed Arabian Gulf Chapter of the Project Management Institute. In accordance with the by-laws, and upon review of the petition to form a local organization, the board of directors of the Project Management Institute presented this charter in March 1993.

The Project Management Institute Arabian Gulf Chapter Mission (objective) is:

- To introduce and promote the advancement of the project management profession in the area and facilitate technical exchanges with PMI head office and other PMI Chapters on project management techniques, methods and current trends
- To provide a source of continuing professional development for members and others within the region
- To develop project management professionalism by providing stimulating, high-quality programs; and by providing a forum for regular interchange among professionals
- To build a strong continuing membership base of project management professionals by providing value-added membership services
- To advance the mission and objectives of the Project Management Institute within the Arabian Gulf Region.

For the year 1995, the Project Management Institute Arabian Gulf Chapter's organization consisted of an elected board as follows:

- President
- Two Boards of Trustees
- Vice President, Eastern Region
- Vice President, Central and Western Region
- Membership Director
- Treasurer
- Secretary
- Gulf Representatives (Bahrain, Kuwait, Oman, Qatar and United Arab Emirates)

1995 was the fourth year of our chapter's life and although a little bit gloomy with the tragic death of chapter president, Mr. Saleh A. Al-Yami, in a car accident on May 27th in the Kingdom, the mission and accomplishments of the chapter were very successful in the chapter's history! The chapter activities and accomplishments for 1995 were as follows:

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Being named by PMI International as "The Outstanding Chapter of the Year" for the second consecutive year in Region I. This award was based on sharp growth in membership and the chapter's program and activities. The membership has grown from 108 to 172.

Awarded second place in the **PMI'95** Chapter Miles Contest held in New Orleans, Louisiana, USA (prize was two free **PMI'96** Registrations). Chapter #57 with 60,000 miles.

Conducted six **Technical/Dinner** Meetings in the Gulf regions.

Conducted one plant tour at the Jubail Industrial City attended by over 30 participants.

Held the Third Annual Conference and Seminar of the Chapter on November 28-30, 1995 in Dammam, Saudi Arabia, focusing on "Excellence in Project Management."

Administered two PMP certification examination (March and December 1995) at the Dhahran International Hotel in Dhahran, Saudi Arabia.

Successful in launching a promotion program where the chapter's activities, goals and objectives were introduced to local business and government firms in the Gulf region. This includes introduction letter and visits by active chapter members to selected companies and individuals. This promotion and awareness program achieved its goal as evidenced by the number of companies that accepted to co-sponsor our **Technical/Dinner** Meetings as well as exhibitions on our Third Annual Conference

Established a chapter representation in the Gulf Regions: Bahrain, Kuwait, Oman, Qatar, and UAE.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

To date, we still have no formal relations with such agencies. However, our members in the local chapter and PMI international who are from government agencies such as PT&T, Royal Commission of Jubail and Yanbu Al-Sinaiyah, SABIC, SADAFA, government hospitals and universities was growing.

Further, we have plans to establish joint efforts with other professional societies with the Gulf such as American Society of Civil Engineers.

SOUTH AFRICA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

Project management has been used in South Africa for more than 25 years, with its early development and growth in the engineering & construction sectors. The South Africa Chapter of PMI was established in 1981 and is the oldest international chapter outside of North America and this year celebrates 15 years as the sole custodian of the profession in SA. Today, project management is practiced in a wide range of industries at various maturity levels. The most rapid growth is currently experienced in the Information systems, financial services and new product development sectors with the government sector poised for growth.

What industries or types of projects are the main users of modern project management in your country or region today?

In its formative years, project management in the architect, engineering and construction industries intended to follow the influence of the British professions while major projects undertaken in the petrochemical and minerals industry introduced American philosophies. Today all these industries are using project management together with Information systems, financial services, government, defense, communications, pharmaceutical, i.e., the full cross section covered by PMI's specific interest groups.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

As investor confidence in the SA economy grows, many projects currently in the planning stage are expected to start. Regional collaboration in southern Africa is expected to generate many opportunities.

Major growth is expected in the government and parastatal sectors driven largely by the dynamics of transformation through privatization, commercialization and rationalization initiatives. The Ministry of Public Works is currently involved in major restructuring initiatives that are due to transform the department into a project driven organization.

The National Reconstruction and Development program has generated an increased demand for improved ways of executing social and infrastructure projects. There is, however, a need for project management in all industry sectors. The backlog of infrastructure in the housing, electricity and telecommunication sectors offers significant growth opportunities. South Africa has a well developed financial services sector while the information technology sectors continue to grow rapidly.

How can the project management profession be most effectively advanced in your country?

Project management education, training and certification within the framework of recognized national and international standards is becoming more accepted in South Africa due to the need to improve productivity to enable local industry to compete with the many global corporations now investing in the country.

In September, the new PM Institute will be hosting a briefing session for industry in the role that national PM Standards can play in the emerging structure of the South African Qualifications Authority and the National Qualifications Framework.

What impact will globally recognized project management standards for certification have on the project management profession in your country?

Meaningful internationally accepted standards for certification will enhance and promote the image of the project management profession in all sectors of the economy. Those standards will provide the reference point for South African Project Management Profession to contribute to the emerging standards required by South Africa Qualifications Authority. These standards will also enable the global corporations to recruit skilled project management resources to man their investment projects and thus transfer technology and management skills more rapidly to their local staff.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

A global Project Management Body of Knowledge (PMBOK) should address those areas common to all countries such as multicultural issues, international contract and procurement methodologies and communication issues.

How important will international "Standards" for project management be in your country or region? Please comment.

International standards will enable regions, nations and individuals to benchmark their competencies against the level generally accepted by the global project management profession.

Is project management certification of interest in your country? What type of project management certification?

At the international level there is a widespread and growing interest in project management certification in all application areas. While PMI's Project Management Professional is currently the dominant certification standard for all members of the project team and APM's certified project manager has generated limited interest.

At the national level, the country would need to establish standards of equivalency that would recognize certification from other industry sectors such as the architect-engineering, building & construction and information technology sectors in South Africa who themselves have agreements with other national and international organizations.

The SA Chapter has supported PMI's PMP certification program since its inception and to date has produced over 120 PMPs at a rate of between 15 and 25 per year. Growth in PMP Certification has increased dramatically in 1996 with 47 candidates taking the exam in June and over 50 expressing interest in the December exam.

What is your interest or position in a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

An international professional project management designation administered by a global project management organization is essential for universal recognition of the project management profession. Noting the limited volunteer resources available, this body should focus on priorities, the highest one being internationally recognized certification.

This certification should make provision for adaptation by different national bodies and industry sectors. An objective should be to unify the project management certification process across industries and countries.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Project management associations around the world must increasingly provide forums for communication and collaboration among individual, nation and industry sectors. All electronic communication forms such as e-mail, Internet, World Wide Web CompuServe, etc., should be exploited to maximum advantage. Currently, several home pages on the World Wide Web are providing an excellent service to the project management community, The development of regional initiatives presents a significant opportunity.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The South Africa Chapter of PMI was established in 1981, is a respected member of Region 1, and is the oldest international chapter outside of North America. This year, the chapter celebrates 15 years as the sole custodian of the profession in SA.

The continuous decline of the value of the national currency has resulted in the chapter operating a two tier membership structure. Only 117 (18 percent) of the 833 chapter members are members of the international PMI body. Since the formal announcement of the formation of the new institute, 263 new members joined in the first eight months of 1995. This represents an annualized growth rate of 78 percent.

The project management profession in SA, with the support of industry and the PMI SA Chapter, is preparing to establish an independent, autonomous national project management organization in South Africa early in 1997. This new organization will represent the culmination of the work during 1996 of eight cross functional industry working groups under the leadership of a Founding Forum sponsored by leading South African organizations in partnership with the SA chapter of PMI.

A fundamental goal for this national body is to grow the project management profession by providing a "home" for all project management practitioners in South Africa affiliated to any national and international project management organization or professional society where project management has been identified as a specific area of interest.

The recent launch of the Association of Project Management in Zimbabwe represented a significant event in the development of the project management profession in Southern Africa.

The chapter is centered in Johannesburg and over the years members have gathered in the various centers, or formally constituted branches in various geographical regions. Currently, branches operate in Durban and Cape Town.

The chapter has organized a Project Management Excellence Award for many years. The winner of this award has twice won the International Project of the Year Award. In 1993, the chapter discontinued their newsletter and formed an alliance with a commercial magazine focusing on the projects industry. This enables news of the project management profession to reach a national readership of 6,000, six times a year.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

We have no formal relations with government bodies or agencies or universities. The chapter is, however, represented in these bodies through its individual members. The chapter is affiliated with the Association of Scientific and Technical Societies (ASATS), the umbrella body for science and technology and the Association of Management Institutes, a similar body representing insurance, banking, human resources, marketing. More formal agreements with these organizations as well as other societies and institutions with a common interest in project management are viewed as significant opportunities for future growth in 1997.

SPAIN

STATUS OF THE PROJECT MANAGEMENT PROCESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

The project management profession is growing more and more. But, until now project management profession hasn't been considered as a real profession. In many industries project management is considered only as a role in the project.

During the last year we have been trying to create a PMI chapter. We are making an important effort to see that goal as a reality, because we consider it necessary to be recognized as professionals.

What industries or types of **projects** are main **users** of modern **project** management in your country or region today?

The majority of modern project management users are oil and gas, engineering, automotive industries, electronics/ telecommunications, manufacturing industries, information technology and software development. Every industry in Spain understands project management as a different thing. During the last year, project managers from the university and from information technology and software development have been coming together in order to standardize our project management processes and help us to make project management a profession.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Probably engineering, manufacturing industries, information technology and software development have the greatest need for better project management.

The greatest opportunities for growth of professional project management in our country are the university and the information technology and software development industries. We have a master program in project management at the Politechnical University in Madrid. Also, the multinational companies in the computer business offer possibilities for growth in this area. More and more project management certification is considered very important in the Spanish industry.

How can the **project** management profession be most effectively advanced in your country?

We believe that if we are able to create a Spanish PMI chapter we will be advancing a lot. We are waiting to make this thing happen.

What **impact** will globally recognized **project** management standards or certification have on the **project** management profession in your country?

I think we are improving in the need for project management standards or certification in Spain. We are thinking that the impact in 1997 will be highly positive and we will be able to have at least a few people certified.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

The core of the PMBOK should explain how a project must be managed. The actual content of the PMBOK is very good. Also the new Project Management Integration is very much appreciated in Spain.

How important will **international "Standards"** for **project** management be in your country or region? Please comment.

They are very important in our country. International standards are a "must" in Spain. We believe international standards should reflect the needs of the project management profession. A lot of companies are making the ISO 9000 process certification happen.

Is **project** management certification of interest in your country? What type of **project** management certification?

Yes, we are very interested in it. It is one of the reasons we want to create a PMI chapter. The only certification that exists in Spain is a "Master Program in Project Management" taught by the "Escuela de Organización Industrial" that is called "Master in DIP" (Project Management Integration) and this master was not very popular until now. Then we want to have more and more Spanish project managers certified.

What is your **interest** or position on a **unified global** project management association or organization? If you support such an organization, how **should it** be organized and for what objectives?

Spain is very interested in creating and establishing a project management organization, and we are in the process now. We are very confident of the Project Management Institute, and we think that PMI and other professional organizations may assist us in setting up new associations in countries like us where these aspects have not been developed until now.

How can project management associations around the world better communicate and cooperate to advance the **project** management profession?

Formalizing relationships and maintaining regular communication, meetings and cooperation among national associations and possibly creating a common framework association may help to advance the project management profession.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional **project** management organization you represent.

We didn't have a professional project management organization until now in Spain. We are making efforts to start a PMI chapter. More than 20 people are ready to be members of this chapter in Spain. We believe in 1997 we will have a new PMI chapter in Spain.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Not yet, because we aren't an organization at this moment. We are a group of project managers that have planned the "PMI Chapter-creating project."

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SWITZERLAND

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today? (**i.e.**, newly introduced, growing, mature)? Please comment.

In Switzerland, project management was introduced in the sixties and developed in the seventies and eighties. In practice, project management is more or less used and required in most industries. For important investment projects good project management is a must. If a project fails, the project management quality is one of the first inquiries, if not the main issue. A harsh competition is the actual economic environment.

What industries or types of **projects** are the main users of modern **project** management in your **country** or region today?

Project management is normal in the construction industry, in most cases not only for the total project (owner, architect, engineer), but also internally in the firms involved (**work/contact** management). In the eighties and nineties, other kinds of projects were managed more and more professionally (for example, IT, reorganization, product development, research projects). Some companies have been using project management for decades as an inhouse management methodology. Now more and more medium-sized and small companies are managing by projects.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of **professional** project management in your country? Why?

The most important need seems to be the adaptation, sizing and explication of the project management principles and methods for the individual cases, industries, regions and cultures. The second, at first glance controversial, need is common, well understood definitions that are really useful and applicable for the many cases and areas of theory and practice.

How can the **project** management profession be most effectively advanced in your country?

The professional performance and quality of the growing number of project managers in all sectors of industry and society should be developed by teaching, training, coaching and certification.

What **impact** will **globally** recognized project management standards or certification have on the **project** management profession in your country?

In addition to our own material, mainly project management knowledge and experience from North America, the UK, Germany and France was implemented in our certification program. A global understanding of project management is most important for the exchange of experience, ideas and research outcomes, as well as for international completion.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

It should not be the vision of IPMA or PMI to pack the global Project Management Body of Knowledge into a book. The knowledge, experience, attitude and cultures of project managers deserve a better destiny. What should be useful are guidelines that can be considered when managing projects and assessment structures for training and certification.

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TURKEY

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The construction industry in Turkey has shown significant progress in the last 20 years, and it keeps the pace with global changes of market. The construction companies are now in foreign markets and competing with companies of developed countries for international tender. It can be said that they can not be so successful if they do not use tools and techniques of project management. Several of the companies have already secured and successfully delivered significant construction projects in international markets.

There comes the defense sector, emerging in the late 1980s, project management tools and techniques moved into this arena fast under the name "program management," some of them come with joint venture technology transfer projects. Even so, project management tools and techniques in the construction and defense sectors have not been put into discipline. Classic management models come out on top and project management is not a considerable profession yet. Executives are not aware of the emergence of this profession yet. Technical professionals are being assigned to project management tasks without considering any formal training and are expected to be successful.

What industries or types of projects are the main users of modern project management in your country or region today?

In general, the following industries may be viewed as potential users of modern project management tools and techniques:

- Construction: almost every type of construction project
- Defense: whole sector, especially in R&D projects
- Telecommunication: in state projects, private sector side
- Automotive: after custom union with EU, all projects
- Banking: private banks are a few steps ahead
- Medical: private health insurance services and hospitals.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

In terms of the total value, state executives run the biggest projects. Therefore, without considering sectors, state projects need greatest care. Some state institutions understood the importance of project management and started activities to establish a school for project management. Industries running large-scale domestic projects and competing for international currency shall have the greatest need for more and better project management in addition to the companies which must have project management in obligatory basis forced by state institutions such as the defense sector.

The companies running international projects offer the greatest opportunity for the growth of professional project management in Turkey,

How can the **project** management profession be most effectively advanced in your country?

To have the project management profession advanced more effectively in Turkey, educational programs in this discipline need to be expanded at both **undergraduate** and post-graduate levels at Turkish Universities. In parallel, project management concepts have to be presented to the sector by institutions such as Project Management Associations.

What **impact** will **globally** recognized **project** management standards or **certification** have on the **project** management **profession** in your country?

While companies intend to compete for international projects in foreign and domestic markets, they will imperatively recognize globally accepted project management standards or certification.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

There are four topics which should be included in PMBOK. These are:

- Empathy in human relations
- Marketing and sales
- Negotiations
- Product management processes such as system management.

How important will international "Standards" for **project** management be in your country or region? Please comment.

Currently, it is very difficult to say that international standards for project management are important. On the contrary, except regulatory commissions request them to be used, such as FIDIC specifications for construction projects, they are not taken into account.

Is **project** management certification of interest in your country? What type of **project** management certification?

Any project management certification has no interest at the moment since it is unknown. Recently, Project Management Association of **Ankara/Turkey** organized the first certification exam in Ankara. It is the first step toward certification. The need will be developed in parallel to the advantages of being a "PMI-certified PME" In Turkey, these needs are not yet clear to the private or public sector.

What is your **interest** or position on a unified global **project** management association or organization? If you support such an organization, how should it be organized and for what **objectives**?

Strongly supported. It must be a "Federation" which is supported and represented by national associations. National Project Management Associations must have the opportunity to reflect their problems and experience through this organization.

How can **project** management associations around the world **better** communicate and cooperate to advance the **project** management profession?

A global project management federation must be set up for this purpose. Holding international conferences at regular intervals, forming international working committees, starting a WWW page and discussion lists on the Internet to establish a worldwide project management information network and issuing copies of international (and essential national) project management standards, documents and forms on CD-ROM are few additional ideas that might serve the purpose.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

A fully organized PMI local chapter is not yet formed. Some individual PMI members from Ankara and Istanbul have been recognized by PMI as potential chapter sponsors.

On the other hand, Project Management Association of Ankara/Turkey (PMA), established a year ago in Turkey, started to work on development of project management approaches in accordance with international norms and to create a professional designation of project manager based on certification. PMA, having the aim of establishing a common culture of project management and setting the rules and principals related to project management in all sectors, organizes training programs to achieve these purposes.

The primary objectives of PMA are as follows:

- To investigate possible project management training standards and alternatives across the broad time spectrum
- To investigate a range of possible options and programs for flexible system solutions to meet the needs of modern project management applications in Turkey
- To gain experience and know-how for current modern project management techniques and apply these techniques to local projects by trained project managers and their staffs as a whole
- To provide information which can be used for standardization of project management in Turkey.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Yes. We can split these relations into two categories: one is promotional relations and the other is educational relations. We introduced ourselves and the project management approach to the following organizations:

- Rokestan- Rocket Industries Inc.
- TAI-Turkish Aerospace Industry Inc.
- SSM-Ministry of National Defense Undersecretariat for Defense Industries
- MSB ARGE- Ministry of National Defense Research and Development Department
- Balikesir Sanayi Odasi-Balikesir Industry Organization
- TOBB-Union of Turkish Chambers and Stock Markets.

PMA is targeting some institutions in the projects undertaken by international cooperation in training program and intending to establish a successful project management which is appropriate to the international norms in these institutions. In this content, KOSGEB (Small and Medium Scale Industry Development Organization), TESK (Turkish Merchant and Artisan Confederation), MEKSA (Technical Training Foundation), IGEME (Export Development Agency), TOBB (Union of Turkish Chambers and Stock Markets), etc. are target institutions for PMA in this initiation.

PMA held a PMP certification preparation training during March–May 1996 for 25 participants from various sectors. In this study, 40 hours training was given.

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Turkey has started the execution of "Structural Change Program in State Operations" with Seventh of Five Year Development Plan. The main objective of this program is realization of effective and efficient projects in the public sector.

Project management, with its approach aiming efficiency and effective use of resources in any kind of projects of production or service provision, takes an important role for achieving Seventh of Five Year Development Plan's target in the public sector.

"No matter how great the political and military victories are, if uncrowned with economic victories, the achievements made will not last long," Mustafa Kemal ATATURK, the founder of Republic of Turkey.

I believe that we can achieve the economic victories by project management.

G. Murat Degiz, PMI

UNITED KINGDOM

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The project management profession in the United Kingdom is well-developed and could be considered to be mature. Project management has been in the major project industries, e.g., engineering, construction and infrastructure, for many years and is extremely well defined and understood.

What industries or types of projects are the main users of modern project management in your country or region today?

Project management in the information technology and general business arena has developed over the last 5 years but has now reached a mature stage and is supported by a growing band of experienced project managers using appropriate tools and methods.

All industries in the United Kingdom are moving toward a management-by-project approach. There is no clear distinction between types of projects inasmuch as project management is being applied to small and large initiatives, low-cost and high-cost schemes, and sophisticated and relatively straightforward projects.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Industries divide between those that follow a strict methodology in the information technology and general business areas and the more historical project-based industries that have a more intuitive approach to project management. I am not sure one could identify which industries have a greater need for more or better project management. All industries are improving their understanding and application of project management techniques. Probably the greatest change is the recognition of high-level input at the front end of the project and more attention to the interpersonal skills.

Particularly on internal projects, the needs to motivate and manage a team and to establish and ensure communications throughout the organization are essential. In the traditional project industries, where the client appoints a group of companies to design, develop, implement and hand over a facility, there is less need for the selling of either projects and the benefits of the project.

How can the project management profession be most effectively advanced in your country?

Project management can most effectively be advanced by making more people and organizations aware of the benefits of this approach and the fact that most, if not all, team-based working practices is indeed project management. People focusing on the wider range of skills necessary to successfully manage a project and then applying those skills would effectively advance the profession.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Globally recognized project management standards or certification would add value to the existing program. As the growth of multinational projects and mobility of labor increases, so the benefits of a transferable qualification expand. However, this is limited to a relatively small group of people, and the general acceptance, or indeed need, for global standards has not been determined.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

The global Project Management Body of Knowledge can only identify high-level generic issues in project management. It is not possible to have a single detailed Body of Knowledge because all countries will develop and progress ideas in their own cultural style. Whilst the techniques and applications of project management may be universal, the detailed implementation and approach is a very personal issue.

How important will international "Standards" for project management be in your country or region? Please comment.

International standards of project management would be appropriate providing they are a framework or guideline. Again due to the variety of projects and clients, I do not believe it is feasible to impose a standard on how all projects should be managed. By their uniqueness and individuality the project management methods and approach must be tailored to a specific project.

Is project management certification of interest in your country? What type of project management certification?

Project management certification is of interest in the United Kingdom. A number of organizations are seeking certification programs and, in particular, demonstration of an individual's ability to manage projects or indeed play a very significant role in the project team. The focus is clearly on an individual's ability, not on an individual's knowledge of project management issues.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

I was personally involved in the initial meeting for the global Project Management Association. I believe that the main benefit of a global federation is to agree on standards of reciprocity of membership. It would also enable information on developments of project management to be swiftly exchanged between countries so that the art and science of project management can be developed at an even faster pace.

The organization could be on either formal or informal. The important thing is to ensure that all countries have an equal say and right to contribute to the development. Its main objective must be for the mutual benefit of all members.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

To ensure greater communication and cooperation all project management associations should respect the ideas and geographic boundaries of other project management associations. The important thing is for organizations to collaborate and not develop into a confrontational attitude over promoting different ideas of standards and programs. With a clear spirit of **understanding** and cooperation, communications could then be established by means of electronic network and regular, i.e., annual or biannual, high-level meetings. Possibly national associations could naturally form into geographical divisions, and each could elect a member to represent them in a global forum.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

The APM Group Limited is the trading arm of the Association of Project Managers (established in 1972). The APM Group Limited was established in 1992 with a clear purpose of promoting the use of project management and providing advice and support to clients and practitioners alike. We provide a whole host of services ranging from advice on Professional Indemnity Insurance, training programs, recruitment service, development of ideas, methods and general promotion of the profession.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

We have established relations with a wide range of universities, agencies and government departments of all types. We also have an extensive network of over 150 companies, which either provide or buy in project management services that represent the leading thinkers of project management in the United Kingdom.

UNITED STATES

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (*i.e.*, newly introduced, growing, mature)? Please comment.

Project management has been in use in the United States for decades. Historically, project managers came from the construction (engineering) and defense industries. Project management is beginning to be recognized as a profession. Managing by projects, managing through projects, and managing entire corporations on the basis of projects is at various growth stages, depending on the industry.

What industries or types of **projects** are the main users of modern **project** management in your country or region **today**?

Construction/engineering, **defense/aerospace** and pharmaceuticals are probably the most developed industries using project management in the United States. Information management and movement (telecommunication), information systems, financial services, gas and electric utilities, manufacturing and environmental industries are rapidly growing in their use of project management. Within the Project Management Institute, telecommunication (14.9 percent), **computers/software/data** processing (14.6 percent), construction (13.2 percent) and engineering (8.8 percent) are the most represented industries.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? **Why**?

Based on membership data from PMI, the industries with the greatest growth percentage are information technology, information systems and telecommunication. Business management, **health/human** services, financial services, public administration/government, **oil/gas/coal** and most manufacturing industries (*i.e.*, automotive, machinery, electronic, food, plastics and wood) are offering new opportunities for the growth of professional project management.

How can the **project** management profession be most **effectively** advanced in your **country**?

The advancement of the project management profession will depend largely on the perceived and actual benefits realized by major corporations and institutions, including government. Marketing efforts will need to be increased to create the awareness of project management's benefits. The downsizing, rightsizing and flattening of corporations and institutions are pushing project management to new levels of recognition. Continued efforts to develop a standardized or template approach to project management must be strengthened. Project management education, both institutional and professional, must also be strengthened.

What **impact** will **globally** recognized **project** management standards or certification have on the **project** management profession in your country?

Globally recognized project management standards will be critical for global corporations. Certification to ensure that standards are recognized, and that the recognized standards are being **implemented**, will be highly regarded. Thus, the profession of project management in the United States will be more **widely** recognized with certification as a mandatory requirement for many major corporations.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

A global PMBOK must contain the essence of project management knowledge and **experience**—the information people need when they're involved in the formal management of projects. The PMBOK should also address interpersonal skills required to organize and lead a project team, the specific skills needed to plan and control the project and a general management philosophy. Cultural approaches need to be considered in some format.

How important will international "Standards" for project management be in your country or region? Please comment.

The requirement for project management standards is being demanded by more corporations as project management techniques and tools are implemented in their organizations. The following companies have notified PMI that they strongly support PMP Certification and encourage their employees to go through the certification process: APEX Project Management, Asea Brown Bovari (ABB), AT&T, Bell Corp., Bell South, CRS Sirrinc, Digital Equipment, Defense Systems Management College (DSMC), Electronic Data Systems (EDS), EG&T, Federal Express, General Motors Corp., GTE, ICF Kaiser Engineering, Lower Colorado River Authority, McDermott International, Niagara Mohawk, NYNEX, PECO Energy, Perigon, Rust International, Shell Oil, TASC, US West Communications.

It only seems natural that International Standards (when established) will be required by international organizations.

Is project management certification of interest in your country? What type of project management certification?

More than 11,000 PMP Certification Exam applications have been processed to date (1,964 sat for the June '96 exam, up more than 100 percent from '95), and more than 5,600 project managers have been awarded the PMF? There is significant and rapidly growing interest in this **knowledge-based** certification. PMI's Certification Committee has begun analysis on the need for a Certified Project Managers Program and a Certified Project Management Processes Program.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

A global project management organization would need to hold the core intellectual property of the project management profession, *i.e.*, the standards and certification process. However, no one country can be aware of the cultural differences that exist between countries. Thus, each country should be **represented** within this global organization and have the discretion to adapt cultural requirements into the project management standards that require such attention (*e.g.*, contract negotiation), but not to the extent that changes will be at variance to the standards. Each country should also have the ability to customize, within specified parameters, the qualifying requirements of certification. There should, however, be an executive body overseeing these customizations. To prevent global confusion, a system should be established to indicate the country in which the practicing project manager has achieved certification.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Technology has allowed communication to flow with relative ease and low cost. The Internet offers great potential for the exchange of information directly between associations and in project management forums. Cooperative agreements between associations allow for the exchange of ideas and partnering initiatives and should be encouraged. Global forums, such as this one, will also help unify the profession. Cooperative educational endeavors must also be encouraged.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

Established in 1969, the Project Management Institute is an international, nonprofit professional organization dedicated to advancing the state-of-the-art in the management of projects. Membership is open to any person or entity interested in furthering the purposes of the Institute. The board of directors is responsible for the actions of PMI. The board is primarily a policy making body made up of volunteers, either through election or appointment. Elected officers include the Chair of the Board of Directors, President, Vice President-Technical Activities, Vice President-Public Relations, Vice President-Administration, Vice President-Region I, Vice President-Region II, Vice President-Region III and four Ex-Officios. Appointed board members include the Executive Director, Publisher/Editor-in-Chief, Director of Certification, Director of Educational Services, Director of Standards and Director of Seminar/Symposium. Standing Committees include Accreditation, Awards, Certification, Education, Ethics, Information Systems Advisory Committee, Intersociety Liaison, Marketing, Nominations, Project Management Journal Editorial Review Board, Professional Development Group, Publications Board, Research and Development Committee, Standards and Strategic Planning. Other official governing bodies include the Council of Chapter Presidents and the Specific Interest Group Council. The day-to-day operation of the Institute is under the management of the Executive Director.

PMI serves a vital role in advancing the profession. PMI:

- Maintains project management Standards and Certification
- Facilitates project management education
- Advances the state-of-the-art
- Serves as a repository for information that reflects the current state-of-the-art
- Acts as an information distribution forum
- Supports the development of a "community."

Activities provide member benefits that focus on skills and knowledge improvement at local, industrial, regional, and international levels—networking with peers at local chapters; access to a common area of interest in an industry or function through Specific Interest Groups; learning about the state-of-the-art of project management at the Annual Seminar/Symposium; acquiring knowledge at regional workshops; and gaining educational and professional recognition through the PMP Certification program. Publications add to skills and knowledge improvement and include the monthly magazine PM Network, the quarterly Project Management Journal, and access to numerous discounted books and handbooks that add to the project management knowledge base.

PMI has more than 22,000 members and is currently experiencing a 50 percent growth rate.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

As part of its commitment to the educational system, PMI has an accreditation process that seeks to review the content and process of project management education in graduate and professional schools to assure that students who study project management will have the educational background to effectively serve modern society within this field. PMI continues to foster growth in project management courses through undergraduate and continuing education programs.

PMI has entered into Partnering Agreements with the U.S. Army Corps of Engineers and the U.S. Department of Energy. These agreements declare a public affirmation of both organizations' commitment to project planning and control to achieve efficient, cost effective and timely project completion. PMI is currently negotiating similar agreements with other U.S. governmental organiza-

Experience, Cooperation and the Future

tions including the Department of Defense, Federal Aviation Administration, Federal Bureau of Investigation, Government Administration Office, Government Services Administration, Office of Management and Budget and National Aeronautics and Space Administration.

PMI has also entered into cooperative agreements with other countries and associations to foster its mission of "... building professionalism in project management ..." These organizations are AACE International, Australian Institute of Project Management, Automotive Industry Action Group, Construction & Economy Research Institute of Korea, Construction Management Association of America, Engineering Advancement Association of Japan, Institute of Industrial Engineers, Institute of Project Management (Ireland), International Project Management Association, Korean Institute of Project Management and Technology, Performance Management Association, Project Management Associates (India), PMI-Canada, Russian Project Management Association, Ukrainian Project Management Association and Western Australian Project Management Association.

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VENEZUELA

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the project management profession in your country today (i.e., newly introduced, growing, mature)? Please comment.

The project management profession in Venezuela is growing in a very important way. The Venezuela Chapter, centered in Caracas, has a very high level of interest from many industrial sectors, both private and public. The potential membership and resource base is very promising, and we look forward to very shortly becoming a key part of PMI's Region I.

Venezuela has a population of about 22 million and the Caracas metropolitan area has about 4-5 million persons. Caracas is the headquarters of several large, world-class oil and petrochemical companies such as **Lagoven, Maraven**, Corpoven and Pequiven, as well as the umbrella organization for these companies, PDVSA.

In addition, Venezuela has many engineering consulting companies of which the largest are affiliated in varying degrees with U.S. and/or European engineering companies. These affiliated companies, e.g., Kellogg, Bechtel, **Fluor Daniel**, Foster Wheeler, have many PMI members assigned to Caracas and other parts of Venezuela from time to time.

Further, many non-petroleum sector companies who employ project management principles and have knowledgeable professionals have headquarters in Caracas. Procter & Gamble, Latin America is a prime example of a company who has both Venezuelan professionals as well as expatriate project management professionals in its organization.

A further consideration is the unique situation of Caracas in Venezuela. It is "the center" of most project management activity in the country. Professionals in other cities such as Maracaibo, Barquisimeto, Puerto La Cruz and Valencia frequently visit their headquarters in Caracas and undoubtedly would be involved at some level in the Venezuela Chapter located in Caracas.

What industries or types of projects are the main users of modern project management in your country or region today?

See "What industries or areas of application..." below.

What industries or areas of application in your country have the greatest need for more or better project management? What industries or organizations offer the greatest opportunities for growth of professional project management in your country? Why?

Venezuela actually has a labor force of about 10 million. About 8 million of the population is less than 18 years old.

The PDVSA and affiliate companies' "Expansion Plan (1994-2002)" has a specific target, among others, to increase the oil production levels from 2.8 million barrels per day up to 4.0 million barrels per day. Some strategic joint ventures have been formed between national and international companies that are recognized worldwide in the oil business, for exploring the oil-inactive fields and heavy-crude oil extra heavy-crude oil reservoirs. Their investments are estimated to be about 40 billion US\$: 60 percent a shared contribution by **PDVSA** and 40 percent by other partners. At this point, some investments are still needed to increase the refining capacity and petrochemical production levels. The items discussed above means putting large projects into effect that will involve national and international companies that are important in the oil sector. Some of these companies

are PDVSA, **Lagoven**, **Maraven**, Corpoven, Pequiven, Teikoku Oil, British Petroleum, Shell, Exxon, Mitsubishi, Total of France, Texaco, Inelectra, Tenoconsult, Tecnofluor, **Fluor Daniel**, Foster Wheeler, Otepi, Vepica, Jantesa, CIT Harris, Kellogg, Betchel, Tripoliven, and many others.

The chemical sector will continue its increase, through the initiatives of local and foreign private companies and by forces from the petrochemical sector to which it is connected.

In this broad sector, we can gather companies from the following industries: chemistry, agricultural chemistry, plastic resins, plastic, coloring **matters/pigments**, **painting/enamel**, and others. This area of commerce made a gross income of 150,000 millions of Bs. on sales in 1993, and it is expected to put multiple projects into effect, including research and improving the quality of its products. The following companies are outstanding or prominent: Tripolven, Corimon, Grupo Quimico, Polimeros del Zulia, Plasticos Lagos, BASF, **Pinco** Pittsburgh, Montana, Ferro, Shell, Quimica de Venezuela, and others.

The demand for energy foreseen by the year 2010 involves continuous realization of large investments to increase the capacity to produce hydroelectric energy. The construction of the hydroelectric centers, Uribante-Caparo and Macagua II, will be concluded; the construction of the hydroelectric center, Caruechi, begun. Construction of the hydroelectric center, **Tocoma**, will begin later. Also projects will continue to be put into effect to improve and make the systems of transmission and distribution of electric power more efficient. In this sector, the following companies are outstanding: Edelca, Elecar, Cadafe, Enelven, as well as some of the engineering consultant firms, equipment manufacturers, and construction companies that actively participate, including Asea Brown Boveri, Asincro, Deproex, **Dell'Acqua**, Mannesmann Rexroth, Geohidra, Commetasa, Imosa, Waagner Biro, Hilmave, GPI, Consorcio la Llovizna, Marubeni, and others. It is worth mentioning that several of these companies maintain work connections with multinational companies.

The development of tourism has strengthened the construction sector, and housing construction projects will continue to be put into effect. In the future there are projects to build a railway to improve the communications and internal transportation of the country. It has been planned to make a network of underground transportation in the city of Caracas, with the progressive incorporation of 3 additional channels. The companies that constitute the cement and concrete industries have reached a gross sale of 40,000 millions of Bs. It is planned to put some projects into effect to increase the production of these plants.

Among the companies that make up the "iron, steel, and metallurgical" sector, whose sales fluctuated close to 450,000 millions Bs. in 1993, a power increase and some expansion of plants has been foreseen.

In the computer sector we can observe an increase that has been maintained over a long period of time. Sales in this area have been estimated at 40,000 millions of Bs. in 1993. In relation to the growth of software and systems information, sales were greater than 10,000 millions Bs. in 1993. In this sector many nationally and internationally recognized enterprises take part, including consulting firms like IBM, Summa Corporation, Unisys, Siemens, Nixdorf, Microsoft of Venezuela, **Manapro**, Andersen Consulting, Espineira Sheldon and Price Waterhouse, Novellco, **Rodin** Software Applications, Electronic Data Systems, Apple Computer and Plus Systems and **Ernst & Young-Perez, Mena & Evert & Morales**, among others.

Because of the accelerated growth in telecommunications that was started by the privatization of the public telephone company (CANTV) in 1991, we now see new levels of confidence in relation to investments and realization of projects for the period of 1994–2005. The investment made by CANTV alone in the year 1991 was more than 64 millions of dollars, and it increased to more than a billion dollars by 1992–1993. Amongst the areas of growth, in the present and in the future, we can distinguish basic telephone, wireless telephone, public telephone, intelligent telephone, digitalization and complex systems of telecommunications. Amongst others, the following companies are outstanding: CANTV, Siemens, Ericsson, NEC, **AT&T**, Telenorma, Movilnet, Telcel.

Experience, Cooperation and the Future

Another sector that will keep on realizing projects in the creation of new products, improvement of the quality of the existing products, scientific research, raising the capacity of production, and overhauling existing plants, is the pharmaceutical and cosmetic industry and the detergent and hygiene industry. This area of business made a gross sale in 1993 of approximately 100,000 million Bs. Amongst others, we have the following outstanding companies: Hoechst, Bayer, Ciba-Geigy, Sandoz, Abbot, Behrens, Procter & Gamble, Avon, Colgate-Palmolive, Revlon, Pfizer, Gillette, Bristol Myers, Warner-Lambert and Johnson & Johnson.

It is important to point out the development of human resources in the country through training, learning and specialization; "the biggest competitive advantage depends on the capacity of the technological institutes." Institutes of management development continue to improve human resources. We should make a special mention of the Universidad Catolica Andres Bello, which has opened studies for postgraduate students in "Project Management of Engineering" and Universidad Central de Venezuela and Universidad Simon Bolivar for its specializations and magister in management, University Metropolitan for their magister status in management in construction and the Instituto de Estudios Superiores de Administracion, IESA for its specialization and research in the field of management.

How can the project management profession be most effectively advanced in your country?

Just by continuing to insist on project management professionalism, mainly done by the Venezuelan Chapter through its presentations, programs and courses.

What impact will globally recognized project management standards or certification have on the project management profession in your country?

Up to this moment we have had only one exam. Twenty-one people took the exam and nine of them obtained the PMP certificate. Most of them were from one consulting firm. The other consulting firms are making their own arrangements so that they can prepare their people to become PMPs. In the future certification will become more and more important, and from now on we are preparing to give the exam at every opportunity.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global Project Management Body of Knowledge (PMBOK)?

We have no comments to make on changes to the content of the PMBOK. Our only advice would be in the direction of its translation to other languages, especially to Spanish. It should be done so that you have both versions, English and Spanish, side by side, since there are many terms and their translation is not the same in the different Spanish-speaking countries. The PMP exam should also have the questions in both languages.

How important will international "Standards" for project management be in your country or region? Please comment.

See "Is project management certification..." below.

Is project management certification of interest in your country? What type of professional project management certification?

Up to this moment it is not important at all. As time goes on there will become a real need. The type and standards should be those now applied in the United States.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

See "How can project management associations..." below.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

We see PMI today as an international organization. We think that it sounds perfect that every member is part of only one organization and then the group of people that live in a geographical location will work together in a chapter of the global organization. We really think that way is better than to have local organizations that come together in a kind of federation. If we are all a part of the same thing, we will all defend it. If it is necessary or looks nicer to change the PMI into IPMA, International Project Management Institute, we think it can be done. The PMP certificate would have an international sense and would be accepted all over the world.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

There is not too much that can be said. Our chapter is one year old and we feel that we did quite a good job. We have about 100 members, we have done 8 programs, 2 seminars, 2 courses to prepare for the PMP exam, one PMP exam. In every program we had more than 100 people in attendance and in the last one we had 217. We are about to have the annual assembly, where we will decide about our new board. We are completely sure that the potential in Venezuela for the project management profession is enormous and we are trying to be the driving force that will make that a reality.

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

We have relations mainly with the oil companies, the consulting firms, and the Universidad Catolica Andres Bello.

ZIMBABWE

STATUS OF THE PROJECT MANAGEMENT PROFESSION

In general, at what stage is the **project** management profession in your country today (**i.e.**, newly introduced, growing, mature)? Please comment.

In general, the project management profession in Zimbabwe is in the following stages:

There are a lot of project management companies primarily for the construction industry without any professional body to regulate their activities.

Outside the project management **firms**, other companies in the construction, mining and computer industries have project management personnel. At this time, no professional status exists in Zimbabwe.

To address this situation APMZ has been newly formed.

What industries or types of **projects** are the main **users** of modern **project** management in your country or region today?

The three main industries at the moment are construction, mining and IT. We have also had inquiries from finance and government.

What industries or areas of application in your country have the greatest need for more or better **project** management? What industries or organizations offer the greatest opportunities for growth of professional **project** management in your country? Why?

All industries need more and better project management. In particular, the IT industry has the greatest need for better project managers.

How can the **project** management profession be most **effectively** advanced in your country?

The major problem in Zimbabwe is the lack of trained project managers. The high cost of educating people from Zimbabwe in other countries is prohibitive.

What **impact** will globally recognized **project** management standards or certification have on the **project** management profession in your country?

The impact that global standards will have on Zimbabwe will enable us to evaluate local project managers and other individual project managers when they are sent to Zimbabwe from other parts of the world as professionals to assist us.

ISSUES OF COMMON GLOBAL INTEREST

What should be contained in a global **Project** Management Body of Knowledge (PMBOK)?

We are too young in project management to make recommendations to the global Project Management Body of Knowledge at this time.

How Important will **international** "Standards" for **project** management be in your country or region? Please comment.

International standards will be extremely important for us to assess people who are sent to Zimbabwe on contract.

Is project management certification of interest in your country? What type of project management certification?

Project management certification is very important to Zimbabwe to enable us to set standards and to protect the industry from unqualified, inexperienced people misrepresenting the project management profession.

What is your interest or position on a unified global project management association or organization? If you support such an organization, how should it be organized and for what objectives?

Zimbabwe would welcome a unified global project management association as we are unable to keep up with multiple worldwide associations due to our geographic constraints. A global project management organization would ensure we get the latest unbiased information.

How can project management associations around the world better communicate and cooperate to advance the project management profession?

Project management associations can better communicate and cooperate by having a global project management association with a central head office where all information can be kept and accessed.

YOUR ORGANIZATION

Briefly describe the history, purpose, organization and activities of the professional project management organization you represent.

APMZ was founded in 1993 by Mr. Mark Cranko and four members of the construction industry who formulated an open constitution. In 1996, I (Graham Campbell) joined PMI and applied to sponsor the formation of a PMI chapter in Zimbabwe. From a list of PMI members supplied to me, I contacted Mark Cranko and found he had started a project management association. We joined forces and APMZ was formed in April 1996 and a caretaker council was set up. We had the launch of APMZ with a very successful visit by Dr. David Cleland and Bruce Rodrigues in July 1996. We had over 90 delegates attend the launch with over 45 people wanting to join the association or wanting further information on PMP certification.

We have set up two SIGs under APMZ to affiliate to the parent overseas bodies, which we hope will enable us to give our members the latest information possible in the project management profession.

- APM U/K acting chairman Mark Cranko
- PMI USA, acting chairman Graham Campbell

The APMZ caretaker committee is as follows:

- | | |
|------------------------|---------------|
| • Mark Cranko | Chairman |
| • Michael Viljoen | Vice Chairman |
| • Patrick Hart | Treasurer |
| • Kevin Murphy | Membership |
| • Robyn Curas Thompson | PRO |
| • Graham Campbell | Secretary |
| • Jameson Timba | Constitution |

Does your organization have established relations with agencies or departments of your government, or with universities? Please describe.

Our organization does not have at this time established relations with the University of Zimbabwe or the Zimbabwe government.

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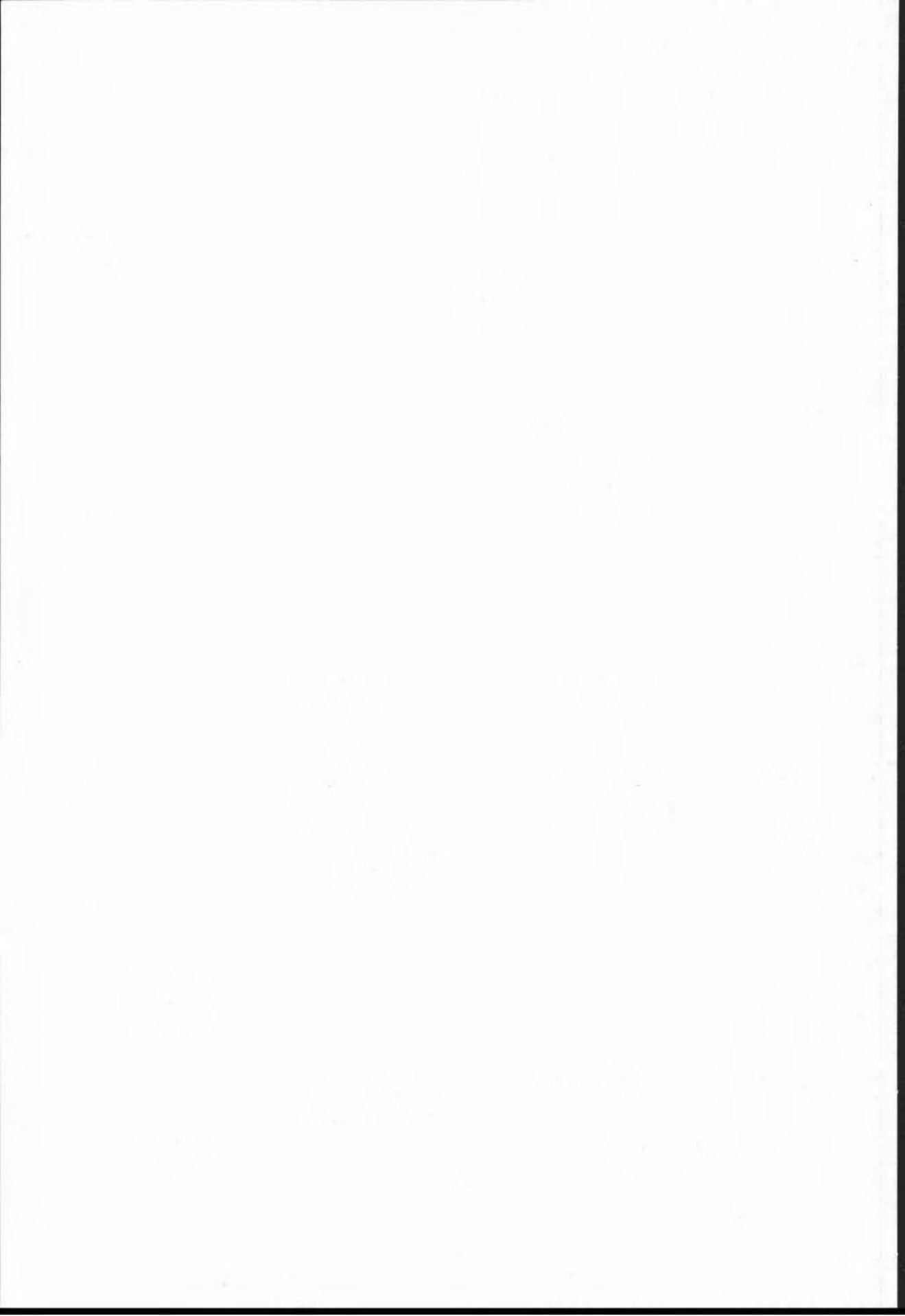
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THE GLOBAL FORUM



KEYNOTE ADDRESS: GLOBAL INITIATIVES BY THE CITY OF BOSTON

Robert J. Wolfgang

Ladies and gentlemen, thank you for inviting me to speak before you about Boston's plans for the global marketplace for the 21st century. On behalf of Mayor Thomas M. Menino, I'd also like to give you a warm greeting for your visit to Boston, America's Walking City. Mayor Menino and I hope you have time to walk to the Freedom Trail and see the many historical sites in the downtown area Boston has preserved.

Our City leaders know, however, that the future is as important as the past. And it is the future that we are preparing for that will guarantee Boston's place among the great cities of the world in the next century. How are we preparing for the approaching new century? In a variety of ways that are all interconnected.

Over 150 years ago, Boston was reaching out to the world through the magic of its clipper ships. There wasn't a port in China, India or Europe that a Boston clipper ship did not visit. Today, our clipper ship does not have sails or a hull or even a crow's nest. Rather, our clipper ship of today is a different vehicle, it is a vehicle known as the information super highway. We will use Boston's strengths to build and expand our international trade and commercial base. Let me outline to you what these strengths are and how we are developing them.

1. Hospitals—Boston's hospitals are recognized internationally. A recent survey by US News and World Report ranked many of Boston's hospitals among the top in many categories of medical treatments. Working with my office of International Trade and Business Development, our hospitals have embarked on an exporting plan; a plan that markets the hospitals to areas of the world where potential patients are in need of critical care. For example, Mass. General Hospital (MGH) recently opened their International Visitor and Patient Center for international patients in need of major operations that cannot be performed in their native countries. And, as part of our private/public partnership concept, the city is working with MGH on an even more challenging project. Some months ago, we proposed to MGH that 15 nurses be invited to come to MGH's teaching hospital from Vietnam to learn new medical technologies and how to operate new medical equipment. MGH is now in the process of developing a 6-month program which will make this proposal a reality...

2. Universities and Colleges—Greater Boston boasts over 60 institutions of higher learning. Many of you already know of Harvard, Mass. Institute of Technology, Boston University and Boston College. But there are also Northeastern, Suffolk, Stonehill, Emerson, Wentworth, University of Mass. and many other excellent schools. In addition to their high standards of quality education and research capabilities, our schools are a magnet for international students. A university such as Boston University is meeting this challenge through innovation and aggressive marketing. Boston University has campuses in Brussels, Germany and Asia, and recruiting offices in Tokyo, Taipei, Hong Kong and Europe.

How are we, the City, working with the colleges/universities to take advantage of this strength? As I stated, many of the international students that come to Boston are from upper class families or are sons and daughters of high level business or political leaders. The chances are good that these same students will in turn become the business and political leaders of their generation. With this in mind, we are now working with selected colleges and universities to sponsor an "Alumni Week" in Boston where we will invite graduates of the past three decades back for a festival of memories. I have a hunch this will be a very successful week.

3. *High-Tech/Bio-Tech Industry*—Since the 1960's, Boston has been a center for the high-tech industry whether it be space, military or computer technology. The statistics are impressive. In eastern Massachusetts alone, there are over 2,200 software companies. The *Wall St. Journal* recently published a story that said of all bio-tech companies currently in existence in America, 50 percent were founded and being run by MIT graduates. Of our high-tech companies in Greater Boston, over 50 percent of them are exporting more product than they are selling domestically. Why the continued success of this industry in Greater Boston? Because we have an abundance of highly skilled and highly educated people coming out of our colleges and universities and the training programs administered by the City of Boston. We also have the High-Tech Business Council, The Mass. Software Council, The Mass. Environmental Council and the Mass. Bio-Tech Council—all set up to help their industry prosper and stay competitive.

4. *Financial Services*—*Forbes* magazine did a survey of American cities to see which city had the most money under management. Yes, it was Boston. Our financial services industry is probably one of the best-kept secrets in America. The truth of the matter is, Boston is the Capital of two financial services; mutual funds and venture capital. *Forbes* stated that there is over 6 trillion dollars under some form of management in Boston—whether that be the billions Fidelity has in their mutual fund business or the trillions State Street Bank has in their custodial accounts. Money is pouring into Boston's financial institutes and this is translating into new jobs, an expanding economy, and international recognition.

In some ways, the venture capital industry is even more impressive. Twenty-five percent of all venture capital funding for IPO's and start-up companies is coming out of Boston today. And, those small companies that are getting this funding are taking a close look at Boston as a potential base of operation or for expansion purposes.

Our banks, Bank of Boston, Fleet Financial, and State Street Bank are know as well in London, Munich and Buenos Aires as they are in Cambridge or Boston. These banks are working hand in hand with my office to promote Boston in the global marketplace. Bank of Boston has established their nationally acclaimed Export school which teaches small to medium sized businesses all the essential financial and technical aspects of exporting. Bank of Boston's ambitious plan is to double the number of exports from Boston and Massachusetts companies by the year 2000. Bank of Boston also presents us with a good example of how our strengths can work together. Some of you may know that Bank of Boston is the largest American bank in South America, having started in Argentina in 1917.

So, as I have described, concentrating on our strengths in Boston has made a big difference—in a positive way—about how Boston is being perceived internationally. But, there is much more that needs to be done because of the competitive nature of the world today. I would like to tell you about one concept that has proven very successful. It is the concept of the "Business Alliance" and it is based on the time-honored Asian ideal of "Relationship Building." Cities all over the world have what is know as "Sister City Relationships." These special relationships are essential for promoting cultural and educational exchanges but lack a business purpose. Last year, we developed a "Business Alliance" concept to promote and develop trade and commerce between Boston and other cities. Our criteria was simple. We wanted to find a Port City that had similar populations, work forces and industries. After much considerations, we chose Bremen, Germany as our partner in the Business Alliance concept. Because this was a new idea, months evolved as proposals an ideas were discussed before a direction finally emerged. But, once we decided on that direction, the results have been very good. Consider our plans for the coming 12 months:

1. Boston University/MIT link up with the University of Bremen. Thii will include student and teacher exchanges and research collaboration.
2. Port traffic increase—Gillette and Mercedes will help up reach our goal of increasing business in the respective ports. Gillette with containers, Mercedes with automobiles.

3. Trade missions to each city of industrial sector groups. For example, we are identifying companies in the software industry from Bremen and Boston that could be potential partners for joint ventures or expand into their respective markets.

4. Tourism promotion in each city is being developed. Bremen will be holding their Expo 2000 in conjunction with the Hanover World Fair in the year 2000. We in Boston have worked out a plan to promote this event along with regular tourist travel to the Bremen area. Bremen, in turn will promote travel to Boston.

We are happy with the progress this Business Alliance has shown, particularly with bringing German and American companies together. So much so, that we have now started negotiations with the Port of Yokohama, Japan to construct a similar program based on the successes of Boston-Bremen. But, none of the program and relationships we are developing can be possible without the infrastructure that is needed to propel Boston into the 21st century as a global center and marketplace. As we expand our economy to complete on a world wide basis, we are also refining and building an infrastructure that will work in tandem.

Some examples:

1. Transportation network. Boston is very fortunate to have its airport located so close to the downtown business center. This provides quick access to and from the city. These are two projects of note that I want to tell you about:

a. The Logan 2000 program administrated by the Massachusetts Port Authority is a bold attempt to make Logan Airport one of the ten biggest international airports in the world. Terminal construction, added runways, and an interconnecting transportation system will ensure that Boston can accommodate the increased tourism and business travel that is expected to double by the year 2000.

b. "The Big Dig"—This is the name given to our ten billion dollar public works project that will put our central artery highway underground over the next seven years. It also includes the Ted Williams Tunnel which goes under Boston Harbor and links Logan Airport with our commercial area in South Boston. This system, when completed, will reduce pollution significantly and make travel much smoother and convenient.

2. Development of international trade and commerce is dependent on an infrastructure that can react quickly to the needs of companies. In Boston, we are lucky to have such a system. Together, the Trade unit of the Massachusetts Port Authority, the Mass. office of International trade and investment and the major's office of International trade and business Development work for the common good of all Boston and Massachusetts companies needing assistance in developing exporting potential or simply expanding their business. The export assist center, in conjunction with the U.S. Department of Commerce is a one stop store for companies in need of export assistance. It is very important that these public agencies share information and cooperate on a regular basis.

Finally, let me say a few words about our waterfront in Boston. I predict in the next ten years that waterfront development in major cities will be in the number one priority of public and private concern, the private to develop and the public to regulate and protect. Our waterfront is without question our most valuable asset, especially from a tourism point of view. The "Big Dig" project is going to open up the waterfront to tourist by removing the biggest impediment to access—the elevated freeway running along the waterfront area. The agency of the city charged with supervising the waterfront development is the Boston Redevelopment Authority which, in itself, is a rather interesting story. The BRA is a semiautonomous agency charged with all planning, zoning, and development issues in the City of Boston. Recently, the BRA and the Massport Authority completed a joint study on a seaport plan for Boston, extending into the 21st century. The study and plan examined all areas of seaport development and issued recommendations for future use. The primary recommendation was a guarantee for continued public access to the waterfront and protection of the continued marine use and nature of the waterfront.

Experience, Cooperation and the Future

So, we are working hard to position ourselves to take full advantage of the opportunities that will be present in the 21st century. But we are sober enough to know the competition will be fierce from every corner of the globe. But, we feel that the city is on the right road through encouraging exports by our companies, attracting foreign direct investment into the city, and promoting Boston as a tourist destination. Our Business Alliance concept will be invaluable in carrying out this plan. So, as you have the opportunity to walk around Boston today, please enjoy our many historical sights but remember we are working on the future as much as we have worked on the past. Thank you very much for the opportunity to appear before you.

Robert J. Wolfgang is director of international trade and business development for the City of Boston. He was formerly a special assistant to President Jimmy Carter and publisher of EUROPA 1992, The American Business **Report on Europe**.

PANEL: PROJECT MANAGEMENT IN THE EUROPEAN UNION

Moderator: Gilles Caupin, president of the International Project Management Association (IPMA)

Most European countries have national project management associations. In addition, the IPMA functions as a federation of national project management associations: 20 from Europe and six from outside Europe, with a total of 12,000 members. IPMA's activities include:

- 20 publications in diverse languages
- 100 national seminars/year plus annual meetings
- International training courses
- Normalization (ISO 10006)
- Research network
- University network
- Certification process.

IPMA Certification Process. In IPMA, we recognize that all the national associations are, in reality, international. APM, for example, based in the **U.K.**, has members in 25 countries. These national associations thought that it would be good for them to come together and cooperate to do those things on an international level that cannot be done efficiently on the national level. The certification process, for example, recognizes the common rules and processes that are shared by the various national certification processes. IPMA validates the varying cultural differences: ways of handling business values, educational systems, languages, etc, while maintaining a certification that is competency-based, i.e. knowledge-based. It is the IPMA certification board's task to maintain coherence, promote common developments and exchange assessors. Certification processes operational today in the U.K., Germany, Switzerland, Austria, France, Norway, and the Netherlands.

EU Member Nation Presentations

FRANCE

Presenter: Gilles Caupin, president, IPMA

AFITEP, the French project management organization, operates a certification program that actually consists of two separate programs:

1. Project controllers (ICEC) = CMP

Requirements: Exam, technical paper, minimum 7 years experience, 2-3 years process

2. Project Managers (IPMA) = CDP

The CDP is accredited by the French official body COFRAC. The stakeholders involved include:

- Industry
- Individuals
- Government
- IPMA
- AFITEP

Experience, Cooperation and the Future

Three levels of certification are possible:

- Project Engineer: 3–5 years experience in project management
- Project Manager (IPMA): 10–15 years experience in project management
- Project Director: highest-level individuals.

UNITED KINGDOM

Presenter: **Ralph J. Levene, Ph.D.**, Director, **MSc** in Project Management, Cranfield University

In the United Kingdom, we have three types of qualifications available in project management.

They are:

- APM—Association of Project Managers
- NVQ—National Vocational Qualification
- Postgraduate Qualifications.

APM's accreditation and validation of project managers is based on the APM project management body of knowledge. It provides a framework for measuring knowledge, skills, and experience. In addition it assesses one's essential proven practical skills. Personal assessors are utilized in this process.

The NVQ Workplace Accreditation, on the other hand, is government-driven. It is oriented to the Construction, Heavy Process, Engineering sectors. APM is involved with concurrent development efforts on this accreditation. It offers workplace assessment, however, it must be noted that there is no proven academic knowledge base for this program.

Academic degrees in project management that are available in the U.K include Post Graduate Degree Programs, both full- and part-time. These tend to be concentrated in the **Engineering/Construction** fields.

Executive Short Courses are another area of education. These include APM-accredited courses as well as other industry-accredited courses. Any public or in-company courses can be used for CPDs, what we call Continuing Professional Development credits (what is termed CEUs or Continuing Education Credits in the U.S.).

AUSTRIA

Presenter: Roland Gareis, University of Economics and Business Administration,
Vienna, Austria

The Project Management Association offers an 8-day training called PM-Basics that includes case study and oral exam. Price: US \$4,000.

Additionally, they offer Program I: Certified PM, a 9-day training in advanced project management, involving case study, oral exam, coaching, literature, and history. Price: US \$6,000. Both these programs are offered in German, for any kind of projects (marketing, organizational development, new product development, etc.)

Program II: Certified International PM is also a 9-day training similar to Program I. However, it is also offered in English, and specifically addresses issues of concern in international projects.

SWITZERLAND

Presenter: Hans Knoepfel, Rosenthaler & Partners, Ltd., Zurich, Switzerland

Benefits of the certification, for the certified project manager, include the verification of his professional performance and an internationally recognized title.

For the companies, the benefits include demonstration of project management competence as a competitive advantage; easier selection of successful and reliable project managers; a continuing education component of the program keeps the Project Manager up to date.

For the Client, having such a certification means less risk in contracting with project managers.

The certification organization in Switzerland, VZPM, is separate from the education and training organizations, but based on national societies for project management. It is structured as follows:

- General Assembly
- Board
- Meeting committee
- Managers of certification
- Assessors
- Secretariat.

Concept for the certificate. The certificate is a personal certificate based on European Standards (EN 45.013). It certifies a combination of knowledge and experience, and includes an additional component on attitudes. The four main areas covered are:

- Principles and application of project management
- Social competence and project organization
- Processes and procedures

Other management fields (such as permanent organizations management, safety, accounting, change management, etc.)

In total, 63 fields had provided descriptions, topics to be addressed and taxonomy by the assessment for project management certification. The assessment covers approximately 90 percent of the same topics as the APM (U.K.) assessment. GPM (Germany) also provided input through discussions.

Admission Requirements. The candidate for certification must be 30 years of age or more, with experience as a responsible project manager, and one of the following levels of education:

- University level—at least 3 years
- Professional diploma—at least 5 years
- Other—at least 7 years.

Procedure. Applicants follow the procedure laid out below. Time frames are approximate.

- Application (first month)
- Self assessment and project proposal (second month)
- Project report (third and fourth month)
- Interview and final assessment (fifth month)
- Plus about one month reserve (six months in total)
- Recertification after three years.

The project to create a Swiss national certification was started in 1992. The first groups of assessors and tests were chosen during April–October 1996, and the first public group of applicants are planned to be processed November 1996–April 1997.

GERMANY

Presenter: **Olaf Pannenbacker, GPM**

In Germany today, PM practices are common in all business and government sectors. "Management by projects" becomes more and more popular. R&D, investment and organizational projects are on the increase, as modern PM concepts are quickly expanding in nearly all sectors. The usefulness of PM becomes more evident for public sector and **small/medium-sized** companies. There is a growing importance of organizational development projects.

"Standards" on a professional level have had a positive impact on the profession.

"Globality" in PM **standards/certification** is extremely helpful for project personnel in international projects, because it:

- Enables comparison of skills
- Avoids misunderstandings
- Eases cross-cultural sensitivity.

Global **standards/certification** need to consider national/cultural/industry specific adaptation under one common PM understanding.

Issues of Common Global Interest. The first issue is one of content: we must separate the **have-to-have** items from the nice-to-have. But how to choose them is the question. It is complex because of the different circumstances in countries and in homogeneous cultural settings.

An important question to be answered initially is, is there one global PMBOK? This will have to be addressed by **truly** international-minded working groups. Existing terms (ISO, DIN, BSI ..) must be considered.

While mere national context, in our view, has little impact, **individuals/companies** in international arena and multinational organizations can bring high value to the process.

The setting of international standards will be an important support for international certification programs such as the IPMA program.

GPM has successfully run the IPMA Certification Program since 1995, in accordance with IPMA regulations. The program has been increasingly well accepted in Germany. **We** have set up PM-ZERT as separate certification body.

For the future, GPM envisions closer global agreement in questions of PM; close international links between national PM associations; and a possible structure modeled on the extended federal principle of IPMA (rather than promotion of a centralized global PM organizational body).

Our Organization. GPM has been the German member of IPMA since 1979. We are a **non-profit** organization, open for everybody. Our 8 governing board members are volunteers.

PM-ZERT is our certification body.

We publish three membership publications: *PM-Zeitschrift*, *GPM-aktuell*, and *PM-Telegram*, as well as providing members with a great deal of electronic communication.

Our conferences and seminars include an annual PM-Forum, seminars (in 1996, we offered 45 one-to three-day seminars) and de-centralized regional events through our chapters.

We provide two education and training programs: PM-Fachmann ("PM-Expert") and PM-Kaufmann ("Commercial PM") in addition to supporting research through Specific Interest Groups and publications.

Future goals include permanent liaisons with other organizations through cooperative agreements, and project-wise cooperation.

HOW MODERN PROJECT MANAGEMENT IS CONTRIBUTING TO KOREA'S ECONOMIC MIRACLE

Pyung Mok Park, PROMAT

Ladies and gentlemen, it is a great honor to be a speaker today for this Project Management Global Forum, especially in Boston which I know served a very important role in American history.

Korea has surprised people all over the world by achieving an extremely rapid economic development in such a short time. I'd like to talk to all the delegates today about Korean economic development and project management.

Korea is a country with a rich historical and cultural inheritance. With only one language throughout its history, Korea is probably one of the most homogeneous countries racially and culturally. The fact that its language, "Han-Geul," is so easy to master has contributed greatly in raising the educational standard and lowering the rate of illiteracy among the general public.

Even though Korea has suffered countless invasions by foreign nations due to its geopolitical location between the continent and other surrounding nations, Korea has kept its rich cultural and racial traditions with high standards of living throughout a 5000-year history.

But, nearing the modern period, Korea became a **typical** under-developed nation due to its rigid Confucian-centered culture, the period of the colonization and the Korean War in early 1950s. The division of the country left almost no industrial foundation and, furthermore, remaining facilities were devastated by the Korean War.

Starting around the 1960s, Korea marched forth toward modern industrialization. The subsequent 30 years witnessed an amazing annual growth rate of 8.4 percent, very rarely achieved in the world. During the 1970s, its solid foundations on overseas constructions and heavy chemical industries as well as the light industries were built. Thereafter in the 1980s, Korea leveled off with the world's advanced nations in home electronics, the semi-conductors and the communication systems.

Presently, Korea is one of the few developing nations that competes shoulder-to-shoulder with the advanced nations in the highly advanced industries.

I'll explain briefly about the main economic index changes of Korea.

From the 1960s to 1995, GNP increased from 1.9 billion dollars to 450 billion dollars while the export grew from 33 million dollars to 126 billion dollars. This translates to a growth rate of 240 times for GNP and 3800 for the export.

The driving force behind such a rapid development could be summed up by 4 main factors.

Firstly, the Korean government, facing the shortage of natural resources and the capital, promoted proper and timely policies for the international exports.

Secondly, Korean industries gained the comparative advantage with the use of its cheap and efficient labor forces driven from people's high educational desires and their hardworking abilities, and thereby concentrating on the labor integrated industries.

Thirdly, the rapid growth of enterprises based on thriving entrepreneurship has been the great support for the economic success.

Fourthly, Korea took the advantage from the international circumstances, for example, by fully utilizing the barrier-free conditions of the export goods.

Therefore, it was possible for Korea to achieve such a rapid economic growth by taking advantage of favorable international situations and the government, the public and the enterprises working in total unison.

But, as the ever-important world situation that made the success possible, are changing fast, Korea today faces the serious crossroads of another leap into the economic growth. Present-day Korea, which overcame the hardship in the past, must face directly up to another tough challenge that requires new terms of development and effective, innovative economic measures.

Considering the internal and the external circumstances that Korea has to face, it would be a very hard task to maintain the rapid economic growth of the past.

While the fast economic growth might have been easily sustainable for the economy that relied on the high-volume production of low-price products, the situation at the phase that has to compete with highly-priced products becomes very difficult to obtain. This phase requires the continuous and ingenious developments of highly sophisticated products.

The essential factors for Korea to maintain the economic growth of the past seems to rely on the shift of the economic direction from the public sector to the private ones, while accelerating the switch-over to **high-value-added** industrial structure.

Facing these economic circumstances, the training of a highly technical labor force, the initiative technological development and the investment into new projects are the common things that are often mentioned. But, I firmly believe a logical and efficient project management is as important, if not more.

As a nation like Korea, deprived of the natural resources, must continuously expand new era with the purpose of leaping into the advanced states, the large-scale projects are likely born out frequently. Here, the importance of project management concepts acquire greater meaning for Korea.

But, before pressing about project management any further, it is essential to recognize first the unique circumstances for projects in Korea in order for the concept of project management to take its roots in Korea, because the concept of project management was developed in western society and therefore must be adapted to fit into culturally and politically different Korean circumstances in order to maximize it.

Because of the large number of members within any organizations participating in the course of project management execution, the project management structures are very often affected by the organization's executing ability, its leadership quality and, furthermore, its individual's social, cultural and economic conditions.

In view of this, the main circumstantial factors that could affect the stability of project management in Korea must be the cultural background, the management staff's inclinations and the specific organization's environments.

First, focusing into the cultural backgrounds of the Korean tradition reveals the fact that Korean labor forces show much more **loyalty** towards their organizations than their western counterparts. Therefore, the accomplishment of their organization's ultimate goal plays greater role in their actions than their self-realization.

As for the management inclinations, the management staffs of Korea put more importance in the positive attitude towards the goal of their organization than their counterpart. But, the fact that they emphasize the accomplishment, the display of ingenuity and the success would not be any different from **westerners**.

Generally speaking, there are definite differences in the standard value of humane evaluation methods which arrive from their differences in traditional ways of communication or thinking. This kind of difference is an important factor to be considered during the process of managing the particular projects.

In explaining the structural environments lastly, there are definite draw lines of the members within the organization about their authorities and responsibilities in western society.

But, within Korean organizations, there is a tendency for the relationship among its members to be more flexible and controlled by the in-group rules or the traditional customary habits. This is because the Confucian tradition still remains strongly in Korean cultural backgrounds.

Experience, Cooperation and the Future

To summarize all these, Korea is in a state of introducing the concept and the technical area of project management requiring the careful researches and the systematic approaches to the environment and circumstantial factors in order to erect its own unique model of project management.

Even though the studies of project management has not been activated and utilized like that of western countries, there are quite a few examples of successful large-scale social overhead capital construction projects with the application of project management concepts.

The one that took the important role in the development of project management in Korea is the power plant construction projects that have been progressing actively since the late 1960's.

Especially, the large-scale nuclear power plant construction projects took a charge in rooting the concept of project management in Korea. Such generation facility construction projects will total 49 billion dollars in next ten years.

Other examples of large-scale projects progressing right now that utilize the concept of project management are road, railway, seaport, and airport construction. Such social overhead capital construction investments from 1991 to 2001 approaches the total of 125 billion dollars.

The completion of these projects successfully and effectively emphasize even more about the concept of project management in Korea.

As well, the successful completion of these infrastructures will definitely have a rippling effect on production, research and other industries amplifying the effectiveness of project management.

But, there are many obstacles to clear in order to carry out these present and future projects efficiently in Korea. It is necessary for both government and private sectors to strive intensely in setting proper, effective economic policies to reflect project management systematically as well as expanding the public understandings on the effectiveness of project management.

Presently, the Korean government is attempting to legalize the fixation of project management concepts and this legislation is under review at the National Assembly.

Also, the plans for a cooperative system among the private sectors are being tried in various ways.

A leading organization of these sectors for project management must be PROMAT, often called the Korean PMI. In future, PROMAT is planning to build the project management system in different types, thereby inducing the efficient application by the general industries.

I thank all the delegates here for listening patiently to my thoughts in the Korean economy and the project management. I sincerely wish the cases of Korean economy using project management systems can be both useful and helpful for all the developing nations. And I firmly believe that the application of project management concepts will assist in the accomplishment of Korea's another leap into a new economic phase.

Pyung Mok Park is general manager of the Korea Electric Power Corp. and an active member of PROMAT

PROJECT MANAGEMENT IN INDIA—A LAND OF MANY CONTRASTS AND OPPORTUNITIES

Adesh Jain, Project Management Assoc.

We live in a momentous time.

For the first time in civilization, *global human networks* ("soft" side) are being built which have far reaching implications and will cross all frontiers of imagination. They are modern Pyramids, Great Wall and Taj Mahal—project which represent the "hard" side.

These times are characterized by:

- An unprecedented rate of change
- Transition management—a complex process
- The emergence of "time" as the most strategic weapon
- Considerable reduction in cycle time between concept and implementation
- "Customer Joy" is becoming the master key for organizations to thrive.

	<i>from</i>	<i>to</i>
Vision	Myopian	Beyond 2001
Economy	Agriculture	Information Age
Human Resource	Large Illiteracy	3rd Largest Technical Force
Income Level	Very Poor	Extremely Rich
Market Place	Low Quality	Highest Quality

Old civilizations stepping into new millennium have many challenges before them:

Strengths

Acceptance to Integrate with the World Economy
Strong Democratic System
Established Structure
Abundance of Resources
Huge Market Place

Weaknesses

Neglected R&D and Training
Political Interference
Bureaucratic Procedures
Not Tapped Adequately
Compulsions to be Competitive

Opportunities are in abundance as we integrate India into the New World order.

Trends—An Overview. Some general trends include economic reforms necessary to integrate India with global economy which is changing irreversibly. Also, India possesses a mixed economy, in which government and privately owned businesses both have place within a society that is characterized by the coexistence of agricultural, industrial and information age. As with any transitional economy, we are experiencing a conflict between short term gains and long term losses. Transition management is therefore a complex task due social, economic and political factors added to the unprecedented rate of change worldwide.

Some project management related trends include the political compulsions to start too many new projects, leaving on-going projects halfway finished. We are plagued with a chronic shortage of resources. One way to overcome this is to place emphasis on the "soft" sector. ("Hard" projects are those such as construction, new production lines, complex aerospace/defense projects, while "Soft" projects include organizational or cultural change, human network management etc.). A focus on such soft factors as team building and leadership dimension are crucial to project management, especially under time and resource constraints.

Some of the project implementation concerns of India specifically that need a "hard" look are:

Secondary Parameters

- Budget Cost Controls
- Coordination
- Systems and Procedures.

Primary Parameters

- Clearances and Acquisition
- Procurement
- Organization Design and Teams.

Foundation Parameters

- Political will—Structural Reforms
- Transition Management Strategies
- Separation of Politics from Management.

Mastering Change

Mindsets (Training)

Long-Term Integrated Approach

Empowerment and Continuity

Risk-taking Culture

Redefining Self Reliance

To advance the project management profession we must follow the Project Life Cycle approach, placing greater emphasis on project planning and conceptualization, using "What if" analysis to reduce uncertainties, establishing certificate programs leading to the award of **project management diplomas/certificates**, encouraging risk-taking, sharing knowledge through case studies and finally understanding that project management is an art and science of converting "*vision*" into "*reality*."

The 21st century will demand a great deal of learning and sharing, evolving new ways of thinking, crossing all frontiers of imagination and tapping of an individual's hidden potential. *In order to step into tomorrow*, let us come together with the spirit of learning and sharing.

Adesh **Jain** is president of the nonprofit Project Management Associates and director of the Centre for Excellence in Project Management.

GLOBAL PROJECT MANAGEMENT AT NCR

Patricia Peters, **NCR**

It's been said that some of the important traits a project manager can possess are great flexibility and the ability to be extremely nimble. I share this with you today because as I looked over the agenda this afternoon, I noticed a 45 minute time frame in the agenda for speeches by the Global Forum corporate sponsor.

After my initial terror—as I was not previously aware of the agenda—I took a few moments to reflect on how we come to be a corporate sponsor for this important event as evidenced by this room and others representing 40 countries and various project management organizations. As background, NCR is a global technology and services company providing solutions that connect people and technology around the world in the retail, financial, and communications industries. The solutions are delivered around the global touching nationalities and cultures worldwide.

This is an exciting and growing business, but the speed by which technology is advancing and the complexity by which projects of this magnitude face in implementing also bears with it a great responsibility to our customers and enormous coordination for those corporate leaders whose businesses cut across country and cultural lines.

We, at NCR, have project managers in 130 countries and quickly realize some years ago, that there is a wide variance in how our project managers approach solving problems and how they go about implementing them.

However, we also realize that there is also a great commonality in our projects. To address these differences to draw upon them, and to also understand the commonalities and develop new ideas. We founded a Project Management Countries on a global basis within NCR with representation from all around the globe.

The charters of this group was to:

- Set real-time and living standards and policies
- Develop synergy's of ideas and work practices
- Determine our future vision and direction
- Provide networking and communication vehicles for sharing of ideas.

As an outgrowth, we have gained as a global body, new ways of addressing customer project issues, movement toward a projectized company, continual networking and sharing of our project management commodities, better consistency in project techniques, but most importantly, raising the project management bar as a profession, a business, and most importantly as a discipline.

Seeing these advances in our company and we are continuing on our journey's, we firmly believe that these enhancements can be realized on a global basis through a forum such as this.

This is our hope; this is our intent; this is our goal. Together, let's continue in our mutual project management journey. Working together we can raise that project management bar.

Patricia Peters is director of Worldwide Services in NCR's Worldwide Program Management division.

PANEL: THE INTERNATIONAL PERFORMANCE MANAGEMENT COUNCIL — MULTINATIONAL COOPERATION FOR BETTER PROGRAM MANAGEMENT ON MAJOR DEFENSE PROGRAMS AND PROJECTS.

Moderator: **Elvin** Isgrig, PMI Director, Educational Services

INTRODUCTION

Jim Muir, Director Project Management Systems, Australian Department of Defense

This session will present the story of cooperation in project management between the Departments of Defense of Australia, Canada, Sweden and the USA. The forum for this cooperation is the International Performance Management Council (IPMC). The session will consist of four parts: An overview of the IPMC and Australian update, which I will give, followed by a Canadian update by Rick Trites and a U.S. update by Wayne Abba.

Some History. The U.S. began to use an earned value performance management approach to project management with the issuance of the Cost Schedule Control Systems Criteria (C/SCSC) in 1967. Despite some shortcomings in implementation the earned value approach to project management was validated in independent studies conducted in 1984 and 1989. These studies called for reengineering of the implementation practices.

Australia and Canada adopted the earned value approach to project management in the 1980s in an effort to improve their project management performance, based on this U.S. best practice. Both countries adopted similar criteria to those used by the U.S. Cooperation in the area of project management led to the formation of the IPMC in 1993 with the support of the acquisition principals of Australia, Canada and the U.S. under their trilateral Defense Cooperation forum. This cooperation was further formalized with the signing of a Trilateral Memorandum of Understanding (MOU) in November 1995. Sweden joined the other three nations in the IPMC in 1993. The United Kingdom and New Zealand have been attending meetings and may soon join.

IPMC Mission and Activities. A voluntary forum established to share information on member policies and practices for project performance management, IPMC encourages other nations to participate, and seeks to improve the effectiveness of the earned value management of projects.

The IPMC meets twice each year, generally in conjunction with some project management-related conference. Its major activities are: exchange of information on earned value performance management (EVPM) policies and procedures; exchange of information on contractors using EVPM; mutual recognition of contractor's validated EVPM systems; advocacy of improved project management based on risk management and EVPM; and outreach to industry, academia and professional associations.

Implementation. The IPMC is a vehicle for MOU implementation. The U.S. provides a central information repository. Members consult where contracts requiring EVPM are awarded by one participant to be performed in another participant's country. Exchange of professional staff is provided for under the MOU, and the U.S. and Australia have undertaken a number of useful exchanges. The MOU has been promulgated to industry to make them aware of the level of cooperation and mutual

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recognition of validated systems. The MOU provides for extension to Defense organizations of other friendly Governments

Goals. Goals for 1996 were to double MOU participation, and to develop an International Standard or principles for project management incorporating earned value management, with industry to take lead and responsibility with a preferred ISO model with third party certification.

AUSTRALIAN UPDATE

Jim Muir, Director, Project Management Systems, Australian DoD

Policy information documents are being added to PM Web Page (<http://www.acq.osd.mil/pm>). Australia is working with U.S. Industry Standard and Canadian Draft Project Performance Management Standard and looking at the potential for international use of these documents. There is ongoing dialogue on implementation issues.

Australia has prepared a paper on Project Management Best Practices for consideration in the trilateral principals forum. Defense in Australia has a strong level of cooperation with the Australian Institute of Project Management. Defense has a number of corporate memberships. The Australian Performance Management Association is also cooperating closely with the Australian Institute of Project Management (AIPM) with a view to closer links. EVPM is now taught at three Australian universities, at undergraduate and graduate level. Defense views the graduate-level training of its project managers as an important priority. There is work being conducted on developing an Australian Standard for EVPM, to provide for possible a future ISO standard. Defense and AIPM have cooperated closely in developing Project Management Competencies.

Consultation has been undertaken where contracts performed in another participant's country. Examples are: E-Systems Greenville (P3 Upgrade), Raytheon Boston (ADATS Project); CAE Montreal (Simulator Projects).

Summary. The IPMC has proved to be a most valuable forum for international cooperation in project management. It does so using a very simple model, with no bureaucratic overhead. Participants exchange best practices and lessons learned in a forum which respects the value and sovereignty of each nations approach. It is a model we commend to the Global Forum.

CANADIAN UPDATE

Rick Trites, Canadian Department of National Defense

There are many benefits of the IPMC. For example, the information exchange offered by conferences, papers, and review of member standards (through e-mail, Web Site) is invaluable. Also, the reciprocal-recognition by defense contractors has been extremely important with such major contractors as SPAR Aerospace and E Systems/Raytheon. In addition, the IPMC is a forum for the international promotion of Earned Value, through the development of standards, through forums, and through working with industry. Finally—always important to a government agency—there's very little overhead cost associated with the IPMC.

From the Canadian DND's point of view, we are facing a Project Management Environment characterized by major budget reductions and downsizing, as in the case of most organizations in both the public and private sectors. We've had very significant reductions in personnel and budgets. The Capital budget is now \$1.6 Billion (Canadian)—down from \$2.5 billion in the mid-80s.

Importance of Business Planning & PM Discipline. There's been a great deal of project management involved in the reengineering of the organization itself. Right now the challenge we are fac-

ing is to meet reduction targets based on input from the private sector. Some of the reduction targets for the ongoing Material Acquisition BPR are:

- 30 percent in process cost
 - 50 percent in process time
- 50 percent in process time for engineering changes
- Disposal process benefits.

These are on top of the roughly 50 percent reduction in staff already taken.

Procurement Strategies. The National Treasury Board identifies three procurement strategies. The Unique Government Development (NDI/DI) process, which is the first strategy I'd like to describe, is the old way of doing business: full-scale engineering development, a lot of systems engineering, with the emphasis on performance and quality. The focus has gone to the other end of the spectrum, to buy as much as possible Commercial or Government Off-the-shelf. Then Solution Oriented Procurement strategies try minimize the development tasks and limit the cost of systems acquisitions; to meet a happy medium between the two approaches.

Formal Risk Management. The process for approving projects and for allocating resources is now formally based on risk management. IN the old days, a project was never presented as "high risk." We're attempting to change that. Obviously, as much as possible, you want to reduce risks, or transfer them, and mitigate the risks that you can't avoid. We're trying to bring that **upfront** in the process. The project planning and approval process has been streamlined significantly.

Another important element is an enhanced PM framework for IT projects. The assumption here is that these projects are very high risk. You apply the normal standards of project management, but you also gate them with very short-range approval steps and very strong exit criteria as you move forward in the project.

Standards and Training. Finally, there is an extremely high demand for PM "**competency/skills**" training. We're trying to meet that demand with different and new kinds of training. For example, project management courses we just contracted for has less than 30 percent lecture time; the rest is simulations, role playing, case studies. The objective is to provide competency and skills to the project managers and staff.

In the area of Standards and Training, our most notable contribution is the Cost Schedule Performance Management Standard (CSPMS), CGSB 187-1.93. Also, the Project Performance Management Standard (PPMS)- advanced draft, "**lite**" version of CSPMS, available on the IPMC Web site. I hope that shortly there will be a DND Web site as well, which will contain our policies, standards, and practices for project management.

We've also done a rather extensive Project Management Occupational Analysis (PMOA), which has restructured the training. We're developing and are modifying 17 modules of PM Training into three levels:

Basic—2 weeks, 1-3 credits

Intermediate- certificate 15 credits

Advanced- Masters Degree 45 credits, available in both French and English.

DND-PMI Cooperation. DND has relied on PMP certification for basic PM knowledge requirements. More than 600 PMP candidates have taken Chapter Examination Workshop from 1993 to 1996. The demand is extremely high, although the demographics of the candidates are changing from technical people to consultants, network specialists, communications and software development people. And of course, DND supports PMI Chapter functions in various ways.

DND Challenges in Achieving Excellence. Our biggest challenge is a great deal of internal focus. Tremendous resources are going into this BPR. And parallel with this is Alternate Service Delivery (ASD), which is basically privatizing or outsourcing DND functions.

We are also reviewing policies, practices and standards. We are developing a PM "methodology" for Equipment Management Teams (EMTs).

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Perhaps our biggest challenge is to determine PM Competencies. After this reengineering is over, we will have to come back to this core problem of what is a project manager and his or her staff need to be effective in the project management environments we work in, addressing:

- Job design
- Performance measures
- Learning system and certification
- **Incentives/rewards** and appraisals/compensation.

Opportunities For Cooperation. I'd like to draw your attention to the country report and the discussion of the formation of PMI Canada. There's also a discussion in that report of PM competencies and provincial certification. Finally, here is the URL for the PMI-Canada Website: <http://www.pmi-canada.org>.

UNITED STATES UPDATE

Wayne Abba, Senior Program Analyst, Office of the Under Secretary of Defense (Acquisition and Technology). U.S. Dept. of Defense

We're billed here as a military panel and that's a bit of a misnomer. Our defense organization is in fact a civilian organization. But there's a very strong parallel with what you're talking about here today. We are a multicultural organization: the three branches of service are very distinctly separate cultures and within them, have many distinct internal cultures. Our military systems are air, land, sea and space, and they span the spectrum of weapons systems, but they also include automated information systems, environmental work, vaccine development soft projects—all of these enterprises are being brought into mainstream project management.

In New Orleans last year, what really struck me was the very strong parallel between what's going on here in the Global Forum and the IPMC. Today, I'd like to talk about how the US DoD is cooperating with US industry, with other agencies of the U.S. government, with professional associations, and internationally as well.

The DoD is perhaps the world's largest if not ablest laboratory for project management. My office writes policies and procedures for project management but we also monitor the execution of our approximately 100 largest programs. Every 90 days, every program submits an integrated management report that's reviewed in my organization. We have a tremendous history with hundreds and hundreds of contracts that we can draw on. The DoD is widely known for management failures; what's perhaps not as widely appreciated is that we have a tremendous number of management successes. I think what we can offer this body is experience going back three decades in integrated project management. Perhaps as you struggle with concepts such as international standards, we might have a model that bears looking at.

DoD Project Management. We have just come through the most rigorous period of acquisition reform that I have ever been subjected to. The Clinton Administration came in and basically turned our policies and procedures on their head. Those of us in the career area had to go into that mess of broken china and pick up the pieces. and try to figure out what was good, what needed to be reinstated, or brought back in some other form. I think the reason the administration operated in that way was after all these years of bureaucratic creep and all these regulations that have come into being, that if they had put together a commission to study it, we would still be doing that 10 or 15 years from now. So we've come through a very intense, very substantive period of acquisition reform.

Acquisition reform has as one of its tenets to go commercial wherever we can: use credit cards, do common sense commercial procurement. But the world I represent is one of risky projects, where we enter into contracts with an industry that are cost-based—that is we share the risk with our

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contractor. And after all the acquisition reform, for those large, risky programs, we have reaffirmed our long-proven requirements.

We emphasize integrated project management. That is, to bring the resources and the costs, to be planned and managed together with our schedule and technical aspects. That's been the emphasis on the earned value management side, is to bring resource management to those other things that we feel we've done well for a long time.

DoD Regulation 5000.2-R. Our new DoD regulation is available on our Web site. It covers the mandatory principles that govern our acquisitions and included in that are the 35 criteria that have been around since the 1960s, that have stood the test of time. That regulation has as its third tier something we call the "Deskbook." This is not yet fully developed, but will be available interactively. It provides the discretionary practices that go with all these top-level mandatory documents. There's a tremendous amount of discussion within our system. And the Deskbook includes topics such as practical advice, wisdom, and pieces of advice and wisdom may be entered by anybody at the field level. So we will be learning from one another by sharing best practices that are coming up from the bottoms, as well as the top-level principles. The regulation not only applies to our acquisition programs but to our major automated information systems, which have not been subjected to the same project management disciplines over the years. And I would view that as our next frontier for management improvement.

The Defense Acquisition Workforce Improvement Act represents our Congress' attempts to help us improve the quality of our workforce. Our implementation of that is very serious. One person in my office is devoted full time to making sure the right competencies are built into our project manager training. And that goes in two directions. It's bringing project management principles to the business management side; but also bringing business management principles to the project management side, so that we can get our public service managers thinking more about the resource implications of what they do.

Cooperation with Industry. Our cooperation with Industry is a hallmark of what we are doing in the DoD. We've just received, from several industry associations, a letter that transmits the Earned Value Management System Guidelines. When we did away with specs and standards, we wrote a letter to industry that said, these requirements are not specs or standards, but we believe that because we put requirements on contractors that we should work together to develop something that we can both recognize as being beneficial. Industry came back with something that looked very much like our own criteria. So we wrote back to industry and said, just in case you are responding with something that you think your customer wants to hear, let us repeat: we really do want you to develop an industry standard that represents generic management principles.

The industry groups that are involved in this are the National Security Industrial Association, the aerospace industries, electronics industries, and shipbuilding industries. We're also dealing with companies on other bases. Boeing Defense & Space Group, for example, has several locations around the country doing both government and commercial work. We've been working very cooperatively with Boeing over the past few years because the president of Boeing Defense & Space Group has decided to make EV-based management an enterprise-wide requirement, regardless of customer requirements. They are now reviewing their 50 largest programs on a regular basis using almost exactly the same charts and graphs we use in the Pentagon. Having done that, they now have a common basis for communication and an opportunity to make our business together a lot more efficient.

At Lockheed Martin Missiles & Space, we have **empowered** that company to make improvements locally without—shall we say—expert help from Washington, D.C. They are finding that the basic principles behind the government requirements are precisely the same things that they want to do for their commercial work. Their commercial work includes the IRIDIUM project, a commercial mega-project valued at more than **\$3 billion** in the development phase. The IRIDIUM project

took a blank-slate approach to project management and decided that one of the things they wanted to do was to use the same project management concepts that were pioneered in Defense.

Cooperation with other Government agencies. We cooperate with other Government agencies, including the Office of Management and Budget, the General Accounting Office, and non-Defense agencies. OMB has just published a circular that takes these same things we've been doing in defense for these many years and makes them mandatory for non-defense agencies. In other words, everybody now will have to have performance-based system that include an earned value component. The general accounting office has been auditing me for the last two years. They are auditing the difference between **Government** and Commercial management practices; the audit is not complete at this time, but if I can read the tea leaves, the reaction that I'm getting is that they are about to declare that this is a Best Management Practice. The difficulty is not in the principles, but in the bureaucratic way that we have tended to implement them.

Underlying all of this is a theme of reconciling government and commercial practices. I want to do that. I do not want to impose contractually things on behalf of the taxpayer that don't make any sense, that are wasteful. So what we are trying to do, if you can visualize a three-tier model is:

- Agree on the central concepts
- Agree on what the next set of concepts are that might be employed by a large enterprise with multiple lines of business,
- And then talk about the things that exist only because we have the public sector contracting requirement.

Cooperation with Professional Societies. DoD/PMI **Partnering** Agreement is in process with PMI that I expect we will bring to fruition by the end of this year. PMI is also sponsoring a forum, which has become known as the American Project Management Forum. That forum will meet again at the beginning of November, 1996.

Project Management Body Of Knowledge is one of the things that intrigues us about PMI. We were not actively involved with PMI for many years, because we considered ourselves sort of the high end of project management and a lot of the PMI materials didn't address that adequately. It does now. At our Defense Systems Management College, our graduates may sit as an elective for the PMP. A substantial number of them are doing that, and our pass rate is tremendously high--85 or 90 percent.

The interest items, as we have said are to begin to align public and private sectors and to find common ground with civilian agencies.

Electronic Data Interchange has become very important. We are of course, the department that brought you the information superhighway—the Internet. We began to slay our paper dragon about five years ago and have been very successful. We began to develop EDI using ANSI ASC X12 Transaction Sets. We have two sets developed, one for project cost reporting and one for project schedule reporting. Internationally, we are moving those to the UN/EDIFACT message format. The first of those is the schedule message that's being developed in cooperation by the U.S., Germany, Sweden, and Japan.

I won't elaborate any further on the IPMC, except to tell you that we did not coordinate our presentations today. It's been a very powerful thing for me to have other nations take independent looks at what we do and come back and say, yes, those core principles are sound. We have been talking with the U. K and New **Zealand** and I believe both will take advantage of the IPMC very soon.

DISCUSSION

Jim Muir, Australia: I'd like to just, in closing, emphasize the fact that cooperation works very well when people come to it willing to share what they have without necessarily large expectations being

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put upon others. That's been our experience in IPMC: a fairly informal group that comes together, shares what we do, learns from one another, and its been incredibly successful with a very small outlay in **terms** of what we put into it, in terms of personnel, resources, or whatever. There's no large secretariat, there's no full time staff, there's no anything else that supports this endeavor. It's simply part of the way we do our jobs and learn from one another. And I think that's a good model for co-operation.

PM RESEARCH NETWORK: AN OPPORTUNITY FOR GLOBAL COOPERATION

Presenter: Roland Gareis, IPMA

As Director of PM Research for the IPMA, one of the objectives is to promote project management research in more formal, more disciplined ways. IPMA considers their research network as a very open network and we have invited representatives from Canada, the US and many other countries to participate. I'd like to present a few points from our printed information about the PM Research Network in order to set the stage for our working group on this subject to be held later this afternoon.

Right now, however, I feel a little challenged in presenting on this subject, based on some of the feedback I received yesterday, such as, "What is all this about PM Research? We have been doing project management for 26 years and right now some standards have been existing since 1967 and we are doing good projects so why do we need PM research?"

I want to respond to this challenge by saying that I'd like to have some kind of a vision of what project management might be as a product, as a profession, as a discipline. These are the three items that Ms. Peters referred to yesterday in her presentation. I think that project management research can contribute to the profession; I think that project managers need new theories. New theories are required instead of more of the same. So that when projects become more complex, the solutions are not to further detail your network structure or further develop your work breakdown structure, but maybe you might be looking for some new models or new theories.

When you talk about project management as a business, then you might consider project management as a product. I'm wondering where we stand in the product life cycle of project management. Is some kind of a re-launch required?

When we talk about project management as a discipline, I consider it as a scientific discipline. That means all of us are challenged to start publishing scientifically-accepted papers, using appropriate research methodologies and allowing for the proper transparency as to how the research is developed. I think that we are getting a lot of practical experience but that there is a major lack, but also great potential, of further increasing and developing project management by introducing it to other scientific fields and cooperating with universities more than we do so far.

To come back to the question, What is PM *research* all about?, the basic hypothesis is that the way you perceive projects determines the way you define project management. I assume that most of us still perceive projects as complex tasks. What is project management, then? Well, it's structuring the tasks, its carrying out the tasks, doing risk management for the tasks, and you then measure the quality of project management by having a group schedule. Another paradigm of project management would be to consider projects as temporary organizations, then a more organizational theoretical paradigm or approach to project management would be appropriate. And you would ask yourself, How am I designing the organization of this project? I was impressed with the presentation of the Dept. of Defense, but when they talk about integrated project management, it's cost, it's schedules, it's technical performance and risk management. What about organization? What about strategic relationships in the project environment, the stakeholders and so on? I think there are a lot of things that need to be added to project management when we look at it from an organizational point of view. The question of organizational culture might lead to an additional project management function which is the development of the project organization culture. When you see projects as organizations you apply certain concepts from organizational theory. The question of organiza-

tional learning: how does that take place in projects? How does the fact that projects are temporary in nature affect the start up and termination of the organization?

We could also perceive projects as social systems, and apply social systems theory, **constructionism** to project management. If we do that, we define the project management functions again, differently. It's introducing complexity, it's assigning things to the project, it's defining the boundaries and the context of the project. These are project management functions. The methods are just one way to construct the project reality. To say, this is how we need to communicate and build up our respective realities of project progress or project success. We can learn a lot from family therapy, from systems theory, from constructionism, in working with project management. And this is what I think that more PM research might allow us to do, might offer additional points of view.

Context of the PM-Research Network. Project Management is being formally implemented in educational programs at technical and business universities worldwide. In the past "PM-Research" was dominated by technically-oriented practitioners. In the future PM-leaders and students will perform PM-Research more intensively. Many universities have already cooperation agreements with other universities.

PM is an applied research area. There is interest on the part of industry to cooperate in PM-Research projects with universities. There is a potential for international research projects on PM-related topics.

There is a demand for formalizing and professionalizing PM-Research.

Definition of the PM-Research Network. The PM-Research Network can be perceived as a social network. A social network is defined as a set of social systems and social relationships between these systems. The social systems in the PM-Research Network are (representatives of) departments of universities and/or companies. The social relationships between these systems are communications.

Objectives of the PM-Research Network. The objective of the PM-Research Network is the promotion of formalized universitarian research in PM. Information about ongoing PM-Research activities should be provided to all network participants. Competitive advantages for the network participants is ensured by using synergy in an international context.

"Networks are designed to build the central competitive advantage of the 1980s —superior in execution in a volatile environment. No traditional corporate structure, regardless of how delayed, can muster the speed, flexibility, and focus that success today demands. Networks are faster, smarter and more flexible."

—R. Charan, "How networks reshape organizations," *Harvard Business Review*, Sept.-Oct. 1991.
Culture of the PM-Research Network.

Participation in the PM-Research Network is voluntary and self-directed. The cooperation in the network is based on trust and mutual benefits. Information is provided, informal communication is supported. There is no central leadership. Networking happens in all directions. A minimum of formalization is ensuring the continuity of the network.

"Networking is the method to get access to external resources, necessary in the pursuit of opportunities. Thus the realization of importance of networking, and the understanding of the skills involved in making it succeed, are two of the most important skills that can be taught and developed."

—C Jarillo, "On strategic networks," *Strategic Management Journal*, Vol. 9, 1990.

Networking. Network by ... organizing meetings, workshops and conferences in order to exchange information, to create new research ideas and to organize mutual learning; cooperating in **universitarian** research projects, in faculty—and/or student exchange programs, in theses-supervisions, in exchanging and refereeing publications and in exchanging case-studies; **applying** a PM-Research Database, which includes the following data: research institution, country, research program, researcher, research form (Book, Paper, Ph. D Thesis, Master Thesis), research topic, language, finish/publication-date.

Roles in the PM-Research Network. Two central roles in the network can be differentiated: The participant role, which is performed by PM-researchers (**professors**, students and practitioners) **repre-**

senting universities and/or companies, and the facilitator role, which is performed by the IPMA Research Committee.

Researchers from members countries of the IPMA and from other countries can participate. The members of the IPMA Research Committee are:

- Roland Gareis (chairman), University of Economics and Business Administration, Vienna, Austria
- David Cleland, University of Pittsburgh, USA
- Kristian Kreiner, Copenhagen Business School, Denmark
- Rolf Lundin, Umea Business School, Sweden
- Christophe Midler, Ecole Polytechnique, France
- Asbjorn Rolstadas, University of Trondheim, Norway
- Rodney J. Turner, Henley Management College, Great Britain
- Martina Huemann, (student rep.) University of Economics and Business Administration Vienna, Austria.

The participants communicate by exchanging information in workshops and meetings, by performing joint research projects, etc. The facilitator provides communication structures by organizing workshops and meetings, by promoting research projects, by establishing research databases, by performing surveys about PM-Research activities, etc.

"Leadership in a network means facilitating, not control."

—Lipnack and Stamps, *Strategic Management Journal*, Vol 9, 1990, p. 227.

Outputs and Events since **1994**.

Development of "Database: PM Researchers"

PM-Research Survey

PM-Research Workshop, Vienna I: The objectives of the workshop were the constitution of the PM-Research Network were the constitution of the PM-Research Network and the exchange of information about participating network institutions and their research activities.

Meeting of the IPMA PM-Research Committee

Development of "Database: PM Publications" and Distribution to network participants. The Database provides information about PM-publications finished during the last 4 years and about publications in progress of the cooperating research institutions. The database includes the following data: title of publications, area of research, country, type of publication (Book, Paper, Ph.D.-Thesis, Master-Thesis), author/researcher, year of publication, language, status (finished, in progress), research institution, department, representative, address, phone, fax and e-mail address.

PM-Research Workshop, Vienna II: The objectives were the exchange of information about ongoing research activities of the participants and the presentations of the Research Program. "The Project-Oriented Company" of the Extraordinariat Projekt-management and the Systemic-Constructivistic Research Approach.

An EU-proposal on "State of the Art in Management of Small Project" is in preparation. The objective of this project is to research, assess and propose alternatives and adapt currently applied techniques in the project management processes. The study will comprise a couple of PM-Benchmarking cases of Project-Oriented Companies from Austria, Norway and other EU-countries.

The "Database: PM-Publications" will go on Internet to make access to the data more easily. Address: <http://www.wu-wien.ac.at/www/institute/eoproj/pmgruppe.html>

Cooperating with EPCI (European Institute of Advanced Project and Contract Management) a multi-centered European Master Degree in Project Management will be established.

International student exchange for Ph.D. students in Project Management is enforced. In 1996 the Extraordinariat Projektmanagement "hosted" Kjetil Emhjellen, a Ph.D. student of the Norwegian University of Science and Technology for a period of six months.

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The PM-Research Conference (IRNOP-International Research Network and Organizing by Projects) organized by Centre de Recherche en Gestion de l'École Polytechnique de Paris was held 27–29 June 1996 in Paris.

The PM-Research Workshop Vienna III, took place on November 11, 1996 at the University of Economics and Business Administration Vienna, Austria. (On November 12, 1996 the Austrian PM-Day '96 took place).

Today, at the Global PM-Forum in Boston on October 9–10 a first meeting of a Global Working Group on PM-Research took place (see Breakout Session Reports).

I won't go into further detail; I just wanted to show that there are things going on and there is some infrastructure available already, and that what we are trying to do is to extend this network, to involve other countries, other nationalities. There are only a few people here from universities, but you as practitioners, you as representatives of national associations you might establish contacts with some of these people throughout industry. Because when we do project management research, we have to be not too theoretical, but it has to be worthwhile, add value and giving us a chance to deal with new complexities and new types of projects, not just large contracts.

Finally, I'd just like to mention that there is a research program ongoing in Best Project Management Practice There is an international benchmarking project with an international conference planned in April 1998 and we would like to invite all those who are interested to actively participate and cooperate.

Roland Gareis is a professor of project management at the University of Economics and Business Administration in Vienna, Austria and the Director of Research for the International Project Management Association. He also is principal of Roland Gareis Consulting.

ADVANCING PROFESSIONAL PM IN THE NEW SOUTH AFRICA: HOW COOPERATION IS THE KEY TO SUCCESSFUL STARTUP OF PMI SOUTH AFRICA

Presenter: Bruce **Rodrigues**, PMI-South Africa

On the topics of collaboration, cooperation and negotiation, there are some interesting things going on in South Africa and I'd just like to share some of these with you here this morning. There has been some movement in South Africa in the last two or three years to move or transform ourselves from a chapter of PMI into a national organization. While this is no different from what has been happening, for example in Canada, I think that perhaps our collaborative process might be of interest.

First a few words on our track record. We are the oldest international PMI Chapter outside North America, established in 1981. We've supported the PMP certification process since its inception. There was in fact a period of several years where our chapter had more PMPs than any other chapter. PMI has acknowledged two Project of the Year projects in the past five years. WE have been the recipient of project management technology in the form of the PMBOK Guide, and other technologies from around the world. Situated as we are on the Horn of Africa, we don't have the resources to develop these things ourselves, or to put certification processes in place, so we do relay to a large extent on First World organizations to produce those things. We are therefor particularly interested things like global standards, because we cannot afford to adopt one particular culture or one particular approach, other wise we may fall behind.

South African cultures draw to a large extent on the United Kingdom: all our professional societies from the engineering perspective and computer societies, have got significant links into the U.K. Yet we are a PMI Chapter—that's just the way it started. We are very much conscious of the fact that by many governments and multinational corporations, that we were perceived as being a subsection of a USA national organization. Even though PMI has been moving toward becoming more international, still all our strategies and policies come from outside our borders. We used to say that, before our recent elections, that our growth was stagnant because people were waiting to see what was going to happen. But we were at the same time conscious of the fact that we were not really representative of all the stakeholders in our country.

There was also recognition of the problem, which is faced by all third-world countries coming into the global marketplace, and that's the matter of depreciating local currencies. Right now our currency is 4.5 Rands to the U.Ss dollar; when we joined PMI in 1981, our membership was about \$10, now it's \$100, with the changing exchange rate as well as you can see this causes problems. What we've done for the last 4 or 5 years, is we've created a dual membership structure to provide project management professional benefits to people within our country, without their having to be PMI members. But this was not the optimum solution.

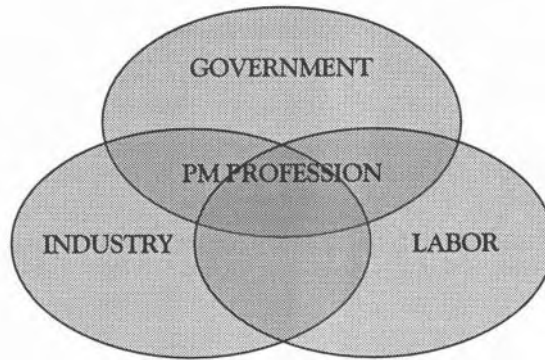
"New" PMI-South Africa Transformation Process.

We recognized that we had to do something different; we needed project management process to deal with the changes that we had ahead of us. First, we consulted the "captains of industry." WE asked them: you tell us what we should look like; how we should transform ourselves.

We shared a vision of the global project management profession and we requested their support. We simply said, if you think this is an appropriate vision, would you work with us in the next year to

Figure A

STAKEHOLDER MANAGEMENT Co-operation, Collaboration, Negotiation



design it together. We also asked for financial backing in the form of some sponsorships, nothing very significant. And then about this time last year, we held a public function to launch the process.

Nothing can be done in our society without collaboration. Our relationship with government and industry, and with PMI has been crucial. This model shows how we've incorporate the views of all sectors. (figure A).

The transformation process and outcomes are summarized on my overheads as follows:

Phase 1: Concept (1995)

- Consult with "captains of industry"
- Shared a vision of the Global PM Profession
- Requested support
- Held Public function to launch process.

Phase 2: Feasibility (1996)

- Launched a "founding Forum"
- Held Project Definition Workshop
- Formed steering committee and sub—project teams for administration, finance constitution, communication membership and education.
- Deliver study and implementation plan this October.

Phase 3: Execute (1997)

- Poll PMI Chapter members
- Obtain further funding
- Elect new Executive committee
- Broaden our base of stakeholders
- Participate actively in future PM Global forums,

Our vision for the future, which is already coming to pass, includes:

- Membership increase (now 642, of which 150 are PMI chapter members; this figure is up 78% annualized)
- We target to reach 1000 in 1997.
- PMP workshop attendance is now 100—up 400%

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- Stakeholders are demanding to join the Founding Board
- Government departments are requesting us to assist their PM transformation and education/certification process.

Our plans for a new Education and Certification process include establishing an internationally recognized, national RSA Project Management Certification Process that complies with the emerging SAQA requirements and also with the National Qualifications framework, and which meets the needs of industry and government as well as of the project management profession in South Africa.

The future looks very bright and very exciting. Yet this is nothing new: we merely want to satisfy our stakeholders; so we reached out to industry and asked them what we should look like.

Bruce **Rodrigues**, PMP, is managing partner of BRP Project Management of Bryanston, South Africa.

SOVNET'S PERSPECTIVE ON GLOBAL COOPERATION

Prof. Vladimir I. Voropajev, SOVNET

Thank you for the opportunity to speak before you today. Although I am scheduled to speak on "Modern Project Management in Russia," I believe for that you can read the country report in this book. Instead I would like to address the issue of project management cooperation between individuals, industry, governments and national and international professional organizations.

Strengthening these cooperations is one of the main goals of the members of SOVNET. This is how we as individuals grow our professional skills: through information exchange, communications, contacts, education, training and certification programs, attending professional events, etc. All these are obligations of professional societies.

Secondly, cooperation of our professional societies with industry is important for the goal of improving, growing and stabilizing our economy. This cooperation is carried out through cooperative agreements, teaching staff, consultancy, etc. This, too, is a task for the professional society.

Next, we must cooperate with governmental bodies towards the goal of creating a market for project management services and growing the national economy.

Finally, there must be cooperation between national and international professional associations and societies. And in order for this to take place, we must develop a global project management concept.

We have already a long history of meetings and discussion, talking about how to communicate with each other about project management. Now we are getting down to the point of defining our goals. We must realize that the evolution of Global Project Management is a program in itself. So we must define our scope and identify the stakeholders—in fact, treat it as we would any other project.

Here is my concept of the global project management "program" in six steps:

1. Identify the need for global project management: who needs it and what do they need? From individuals on up through the national and international organizations.
2. Define the goals and objectives of a global project management system or organization.
3. Identify the stakeholders.
4. Define the scope of the program, a WBS, and deliverables.
5. Define the organizational structure.
6. Give the program our cooperation and support.

Trends in Project Management Development.

Developing project management as a sphere of professional activity in both developed and developing countries should be based on two closely connected approaches: Global and local.

Global development is international and covers components of Project management professional activities invariant to project management practice and the spheres of its application.

Local development is national and oriented to a specific sphere of application, for example, country, region, transnational company, etc.) In local project management development, we must take into account political, social, economic, technological, cultural, regional and other specific features of project management practice.

According to this division, future project management development in our opinion, should follow the path of globalization, unification, and localization.

Project management globalization means forming a global, common-to-all-countries project management understanding and gaining for the profession worldwide recognition as

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- A special sphere of professional activity spread world wide and covering all possible application areas
- A separate, complex, applied scientific discipline with this own theory, methodology, and best practices
- A designation profession of project manager that requires special knowledge, skills and competencies for successful project management.

Project management *unification* means developing project management components, elements, processes and procedures that are common to all countries. (unified definitions, standards).

Project management *localization* means working out how the various project management components and elements reflect the specific features and practical experiences of the local spheres of project management application.

Project management *globalization* would solve the following problems:

- It would provide a global understanding of project management and recognition as a scientific discipline and profession worldwide.
- It would **provide** a scientific basis for project management by standardization an international project management languages (terms, definitions, etc.); project management theory and methodology; an international project management Body of Knowledge that is fundamental to all application areas.
- It would make cooperation between organization and specialists easier.

The results of international forums such as this one can considerably contribute to this movement.

Not only do national and international project management organizations have a part to play in globalizing the profession, but they must gain the support of such organizations as the World Bank, the United Nations, governments and international institutes and corporations.

PM Unification.

Project management unification must include efforts to develop:

- A unified structure for the international body of knowledge, including an invariable core of fundamental knowledge that is common to all countries and application areas. Such a unified structure could assist local countries, technical specialties, or corporations in forming their own individualized body of knowledge configurations, taking into account their specific conditions and requirements.
- A common approach to the education and training of project managers at all levels.
- International, programs based on the body of knowledge for preparing specialists.
- International requirements, programs and procedures for certification and accreditation of project management specialists and organizations; international recommendations for national project management organizations and transnational companies.

The first steps in project management unification could be:

1. Develop international qualifications procedure based on the project management BOK and on the certification procedures of PMI, IPMA, AIPM, and so on.

2. develop the international certification program to **confirm** the competence of project managers, based on the project management BOK and IPMA certification procedures, updates with material from PMi and other international organizations.

3. Develop an accreditation program in the same way.

Develop and introduce appropriate national certification and accreditation program, based on the above programs.

Develop a system of international standards and normative bases on unified project management components and elements, and put them into practice through the international organizations.

This plan is laid out in Table 1.

Stages	Scientific and technical base	Procedures and result	Period of realization
PM Qualification			
a) Temporary variant	Temporary program based on PM BOK PMI, IPMA, ISO, AIPM	Examination, qualification PMP - PMI and IPMA	One year
b) Permanent variant	PM IBOK by FPMA	Examination, qualification FPMA	Two-three years
PM Certification of project managers by their qualifications			
a) Temporary variant	IPMA programs of certification with PMI supplements	Interview + experience report. IPMA Certificate	One year
b) Permanent variant	Certificate program of FPMA	Interview + experience report. IPMA Certificate	Two years
PM Accreditation			
a) Auditors (examiners)	Temporary IPMA/PMI Agreement.	Interview, IPMA Diploma	Two-three years
b) Professional organizations	Certificate program of FPMA	Interview, IPMA Diploma	Three years

PM Localization. Our understanding of project management localization includes development of local supplements and the adaptation of global an unified project management components and elements to the specific conditions of the local spheres of project management application and practice. Such supplements include:

- Adaptation of the project management body of knowledge to local conditions
- Creating national project management languages compatible with the international one
- Creating the national system of education, qualification, certification of specialists and accreditation of project management organizations

Developing special project management methods and tools, recommendations and guides to the application of project management, taking local conditions into consideration.

- International organization of work on project management development.

In order to realize this international program of project management development, appropriate organizational forms, intellectual and financial support are necessary.

The organizational forms supporting global project management development could vary. Our concept is to create an International Federation of Project Management Associations (FPMA), which can unite all existing international, regional and national PM associations and organizations.

The main Purpose of FPMA would be:

- Global project management development and recognition as a professional sphere of activity, applied science and profession, and its promotion to new countries, regions and new spheres of application
- Project management unification and standardization
- Development and realization of international programs and projects on education, scientific research, qualification, certification of project managers and accreditation of project management organizations

Experience, Cooperation and the Future

Organization and holding project management world forums

- Information and publishing activity and services for FPMA members
- Organization and coordination of FPMA members in project management development.

FPMA should be managed by a coordination group, elected for **2-3** years, and should not have a rigid, vertical structure of bureaucratic type.

To create FPMA it is necessary to:

- Create the initiative group;
- Develop the concept and draft the charter of FPMA;
- Obtain consent of international and national organization to join FPMA and come to agreement on constituent documents;
- Hold the Constituent Conference.

The intellectual Structure of global project management development and unification should be conceptualized by and under the aegis of FPMA members.

For this purpose the following should be done:

- Form temporary working commissions and groups consisting of authorized experts for realization of FPMA projects. The list of experts should be confirmed by national organizations and other FPMA members;
- Hold regular discussions on work results, international project management projects and programs during FPMA working meetings and forums;
- Review and approve the final documents on FPMA projects;
- Present approved project management documents to appropriate competent international organizations.

Financial support of projects and programs on project management globalization, unification and localization should be provided by international foundations, international financial and credit institutions, governments of countries concerned, national organizations and transnational companies.

Vladimir I. Voropajev is a hydrotechnical engineer and a certified professor of management information systems. He has served as president of the Russian Project Management Association (SOVNET) and is currently vice president for Developing and Transition Economy Countries of the International Project Management Association (IPMA).

THE WORLD WIDE WEB: TOMORROW'S TOOL FOR PROJECT MANAGERS TODAY

David H. Curling, **PMI-Canada**

The "Global PM Forum—Internet Web" floppy disk was prepared for the Global PM Forum meeting at **PMI'96** October 9–10, 1996 in Boston USA. It represents a first cut at providing Global project management resources. The goal is to improve, through use of the Internet, both personal and professional project management communications, exchange of information and enhance the project management profession. This enhancement to take place within an affordable and pragmatic regime.

The 3 1/2" DOS floppy disk "Global PM Forum—Internet Web" has Internet World Wide Web files for three sites (called Websites) and information on the Internet downloading of a mirror file image of the Internet World Wide Project Web Management Forum. These files will be of interest to project management practitioners who want to explore Internet project management resources. The files represent an October 5, 1996 snapshot of a set of three evolving World Wide Web sites catering to the needs of international project management.

The computer file compression utility **PKZIP** is required to install the files. The files must be copied from the floppy disk to a local PC empty sub directory (not the root directory). Each .Zip file must be decompressed using **PKZIP**.

A world wide web browser must be installed on the local PC to view each web. The web files are in HTML file format and require a world wide web browser to have the files presented as they would appear on the Internet.

Global Project Management Forum Web. A sub directory of the floppy **disk/globweb** contains a file called **globweb.zip**. This file is a .Zip compressed file for the set of hypertext markup language (html) files, documents and image files that make up the Global Project Management Forum Web.

The Global PM Forum Web represents a start on an Internet world wide web focus for global project management affairs. In addition to the published information on events and international project management activity this Web has a help desk where further information can be obtained on the Global PM Forum.

Copy the file **globweb.zip** from the floppy disk sub directory **/globweb** to an empty sub directory on a local PC. For the Global Project Management Forum Web files to work, the **globweb.zip** file must be decompressed using the **PKUNZIP** Application. Next **PDUNZIP** the **globweb.zip** file. The Global PM Forum Web files should appear in a directory under the empty PC sub directory as **/html/pmivirt**.

The Global Forum Web files are now in the sub directory **html/pmivirt** and a number of other **sub/sub** directories dealing with the location of images and documents called up by the html main files. Caution: Ensure that you use the correct command **unzip -d**, if you use a **PKUNZIP** program command line. This command **restores/creates** the Web Directory structure stored in the .ZIP file. If you use a Windows decompression utility (**Winzip**) to decompress the .ZIP file then the sub directories will be automatically created.

Load your **www** browser and then click on the **Edit/Open** File menu item for **WWW** Browsers **Netscape** Navigator or **Microsoft** Internet Explorer. Now move to the new sub **directory/pmivirt** and click on the file **globalpm.htm**. The browser should load this file and you have the Global Project Management Forum **Website** available for off-line review.

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When you connect to the Internet you can use the file hypertext (hot links) to move to remote Internet resources. The first file or lead in file is [globalpm.htm](#). This will allow a full view of resources provided by the Global PM Forum Website and an easy move to other remotely located Internet project management resources.

PMI Canada Website. Files for the PMI Canada Website are also contained in the /pmivirt subdirectory. Load your WWW Browser and use Edit/Open to load the [index.htm](#) file. The first page of the PMI Canada Website will load and is available for browsing.

When connected to the Internet you can then use the hypertext (hot links) to move to other Internet project management resources. The first file or lead in file is [index.htm](#). This file has a menu of resources provided by the PMI Canada Home Page and it is an easy move to remotely located Internet project management resources.

National Capital Region Internet SIG Web. The Canadian National Capital Internet Specific Interest Group (SIG) has an Internet Web with information on Internet affairs and reports that are of interest to project management practitioners. This Web has an introduction to the Internet and includes hot links to remote Internet Sewer (on line) resources and software locations.

This Web file, [igweb.zip](#), is found in the floppy disk subdirectory/isigweb. It is a .Zip file and must be decompressed. Carry out the same file decompression on [isigweb.zip](#) described for the Global PM Forum Web.

Load your WWW Browser and using the Edit/Open menu item move to the new subdirectory/isigweb and click on file [isig.htm](#). The Browser should load and you will have the OPCUG Internet SIG Web available for off-line review. Internet Update is a particularly useful file of information on the Internet.

When you have an Internet connection you can use the hypertext (hot links) of the Web to move to remote Internet resources. The first file or lead in file of the Internet SIG Web [isig.htm](#) has a menu of resources and a start for Internet SIG Web off-line browsing.

WWW Project Management Forum. A mirror copy of the WWW Project Management Forum Web is available through Internet file transfer (FTP) from the PMI Canada Virtual Web Site. This .ZIP file copy of the WWW Project Management Forum can be obtained through Internet FTP from <ftp://pmicanada.org/outgoing>.

Internet FTP can be accomplished with current WWW Browsers or a separate FTP Client. Internet file transfer is accomplished with a Site ID of anonymous and email address for the password.

The WWW Project Management Forum .ZIP file is called [forumweb.zip](#) (2MEG). On decompression this file provides a mirror image of the WWW Project Management Forum Web. A local PC copy of the Forum will provide off-line browsing and review. With an Internet connection the hot links (hypertext) are available for further explorations of project management Internet resources.

Web Locations. The Website copies included on the floppy disk will quickly become dated as changes and updates are made. The Internet addresses (called URLs) for the Webs are:

Global Project Management Forum <http://www.pmicanada.org/globalpm.htm>

The Canadian OPCUG Internet SIG Web <http://www.synapse.net/~loday/isig.htm>

WWW Project Management Forum <http://www.synapse.net/~loday/PMForum/>

Feedback. Please take the time to comment on use of the Internet to improve global project management communications.

David H. Curling PEng, CPM, Fellow APM, is VP-International Relations for PMI-Canada. As WWW Project Management Forum Webmaster, he can be reached at curlingd@pmicanada.org or <http://www.pmicanada.org> or tel. 613-731-5381.

THE WWW PROJECT MANAGEMENT FORUM

"Towards international project management cooperation."

The Web Project Management Forum

- Is a non-profit resource for information on international project management affairs.
- Is dedicated to supporting development, international cooperation, promotion and support of a professional and world wide project management discipline.
- Provides information on what is happening in the world of project management.
- Is a world wide "town hall" setting for information and exchange of project management "know how."

Some of the information sources on the WWW Project Management Forum are:

A Notice Board for posting of notices and information dealing with project management organization on a world wide basis

- An International Project Management Events calendar
- A Directory of world wide professional project management organizations
- A Directory of project management special interest sites
- A list of project management journals and magazines
- A Directory of world wide professional training services
- A Brief on project management documents that impact on the practice, training and professional certification of project management professionals
- An organization of Internet search engines for retrieval of MPM information
- A proactive mailing list for posting of articles and group discussion
- Professional career search resources

<http://www.synapse.net/~loday/PMForum/>

PANEL: PROJECT MANAGEMENT IN LATIN AMERICA: THE FUTURE IS NOW!

Moderator: Paul C. Dinsmore, **PMI** Fellow, President, Dinsmore & Associates

Moderator: Before we begin, I'd just like to draw your attention to the call for papers for PMI '98, which has been issued as a call for papers in English or in Spanish: this is a breakthrough for PMI.

When you see things written about the world, Latin America is not often mentioned; South America has sometimes been referred to as "the forgotten continent." Latin America was until a few years ago a very closed economy. Today you'll find that it's quite open. Aside from the NAFTA, there's the Central American Group, there's the Andean Pact, there's the Southern Cone group, which involves Paraguay, Uruguay, Bolivia, Argentina and Chile. So there are a lot of exciting things happening in **terms** of opening up the economy. For the last three years, Latin America has grown at 3.5 percent economically per year, as compared to worldwide numbers of 2.4 percent. It's a very significant and interactive market.

MEXICO

Carlos Uriegas-Torres

Our organization is the just recently formed Mexico Chapter of PMI. It's mission is to be a forum for PM professionals to network and share knowledge and experience and a medium for extending and disseminating the PMBOK and promoting certification at the international level.

I'd just like to cover two questions that I think are important.

Question No. 1—What are two major industries or application areas where the greatest opportunities exist for future advancement of project management methods and practices in your country?

In the past, all government construction contracts were let on the basis of unit prices, while engineering and design was contracted on a time and materials basis. Today, most large projects are carried out through EPC contracts, where the contractor takes a much larger share of the project risks. Modern PM methods and practices, particularly scope and risk management, become crucial.

On the other hand, there is today a policy towards lean government. Many public services, such as water distribution, seaport and airport operation and telecommunications are being transferred to private companies under "concession" agreements; and several utilities are being built on a BOT basis, including financing. In all these instances an integrated PM approach is vital.

We have concluded that it is in the construction and services industries where the greatest opportunities exist for future advancement of project management methods and practices in Mexico.

Question No. 2—What are the two most significant ways in which the project management profession can be advanced in your country, and why?

Project management in our country has been lacking mainly in, a) Precise scope definition through a WBS; b) Scope, schedule and budget integration through the WP methodology; c) objective performance measurement using the earned value concept; and d) risk management.

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We have to make project sponsors aware of how the problems commonly associated with present practices can be avoided through the application of the PM integrative approach and the benefits to be derived from such approach.

The other side of the coin is to prepare enough professional project managers to satisfy the expected growing demand for their services.

For both of these purposes, our Chapter is placing a major emphasis in education and training of both clients and professionals.

BRAZIL

Marcio Prieto

Mr. Prieto made a presentation on plans to revive the Brazilian project management group that had been started in the 1980's, and which had about 200 members in a chapter that survived for about four or five years. He detailed their efforts to identify a group to serve as the focal point of the effort to create a Brazilian project management association, as well as some of the challenges and constraints facing project managers in doing project in Brazil, particularly projects that involve government cooperation. (For more in depth information on the Brazilian project management efforts, see Mr. Prieto's contact information in the Attendees Appendix of this book, and the Brazil Country Report.)

ARGENTINA

Orlando Marone

It's an honor for me to be here and talk with you. I am representing the very newest chapter in PMI: in existence for just one week.

I have worked for NCR a long time; most of my professional life. And last year, NCR wanted me to become certified as a PMP, which I did. And I used that opportunity to form a chapter in Argentina. The majority of the chapter members are from outside NCR. Our main issue is to find ways to educate chapter members. They want to improve their professionalism in doing projects. And there are not too many great communicators in project management in that part of the world.

First we have to raise the consciousness about what it means to be a certified PMP, because that has no meaning there, they do not understand the significance of it.

VENEZUELA

Juan Simon

I have not been active as a PMI member, but I have been active in project management within my company, which is one of the companies of the Venezuelan oil corporation, and I have been involved in project management from a training perspective. My company is the company within the Venezuelan oil corporation that provides all the training throughout the corporation. This year we have welcomed the help of PMI in presenting workshops and training. I hope that we will be doing this from now on, working together. And I hope to become a member of PMI. If I can help anyone with questions about Venezuela, please do not hesitate to contact me.

DISCUSSION

Comment from the audience (Bill Ruggles, president-elect, PMI): Some of the concerns that I have in terms of the globalization of project management in Latin America have to do with the language; with the terminology and the translation in what is predominately an Anglophone profession right now. There is a dictionary for example that is published by a French Organization affiliated with AFITEP. Their second edition had French and English; the third edition, is French, English and Spanish. Our German colleagues are working on a German translation for the fourth edition. But one thing I'm concerned about in Latin America is trying to reach a consensus in both Spanish and Portuguese as to a common lexicon on project management. For example, the term project management *itself*. the word management does not have a real clear counterpart in Spanish or in Portuguese. I'm wondering if our panelists could comment on that issue?

Mexico: Yes, there is a discrepancy, even within our own country. I think the best answer would be is that we can put all the synonymous words in a dictionary. And let people know that all these terms mean project management. There is no problem with that. If we are flexible, if we don't wish to impose our views on others, perhaps we can reach understanding.

Brazil: The best solution that I have is to translate it in the **terms** of the paper that Paul (Dinsmore) presented: "Management by Projects." This would be the best, which gives us a broad definition.

Argentina: We want to be part of **the** world. I think that English could be the language that can be used in order to have a common definition of all the subjects concerning project management. I think the translation will come later. A Spanish version about project management is important. But the English vocabulary is easily understood by project managers in Latin America.

Question from the audience: Would there be an interest in creating a "community of interest" in Latin America, rather than operating project management associations independently in every country, through PMI? To link yourself together, as for example "PMI-South America." That would solve a lot of problems; for example the translations. You should be the leader of that. If I can borrow from that quote we heard earlier from John F. Kennedy, "Don't ask what PMI and others can do for you, ask what you can do for yourselves." If you represent a community of interest, you should be able to develop your own program and your own interests together.

Mexico: Yes, I think such a network would be very effective.

Brazil: Yes, the appeal of having a community all talking together we could use the concept of SIGS also to communicate.

Argentina: One way to further the work is through people; an area we can work together in is to find people who can go to everyone in the countries and speak about project management.

Moderator: I'd just like to close by elaborating a little on something **Marcio** (Prieto) referred to earlier, and that's "tropicalization." This is a term which is used in reference to adapting things that come from the north into the tropics, whether culturally or otherwise. One of the first examples of tropicalization that I remember was that the power and light company in Brazil for many years was Canadian. And they brought their designs for power lines and so forth to Brazil. Some people started to question after 20 or 30 years, why were these transmission towers so robust and heavy. Well, it was because of the ice-loading. It took a long time to figure out that it wasn't quite necessary, that these things were over-designed. Well, not only to transmission towers need to be tropicalized, sometimes concepts need to be tropicalized and adapted as well.

REPORTS FROM THE BREAKOUT SESSION WORKING GROUPS

Breakout sessions consisted of lively brainstorming sessions that produced lists of ideas and concepts developed in consensus by each group. These were presented in the Plenary Session along with invitations to be involved in continuing work and discussion (usually via Internet) on these topics between this Forum and the next event.

Group 1: International/National Society Cooperation

1st Session

PMI should consider:

1. A model for expanding into countries where:
 - A national organization exists
 - No national organization in place
 - Model should recognize English vs. non-English speaking requirements.
2. Model options may include:
 - Co-operative agreements with national bodies
 - Global project management association
 - Helping to set up a chapter that will become the national organization.
3. Existing **associations/bodies** not meeting needs of all people in the countries. A huge underlying driver to this issue is the demand for certification (PMP).

2nd Session

This working session had 22 attendees and was very productive. After working through objectives for this working session, the group established the following:

1. Vision
"Create an open forum of individuals to allow the free *flow of information* to further enhance *knowledge* and interest in project management in the global community."
2. Objective
"To serve the needs of project management."
3. Needs are:
 - 3.1 The sharing of information.
 - 3.2 Reciprocal information between different countries.
 - 3.3 An understanding of sensitivity areas.
 - 3.4** Lessons learned, i.e., experience transfer.
 - 3.5 More 'face-to-face' working groups, particularly at Global Forums.
 - 3.6 Networking and communication
 - 3.7 Furthering the overall development of present management including:
 - Education
 - Standards
 - Certification.
4. Proposal
"We need a minimal infrastructure (or association) to provide a conduit to international organizations and international companies for the benefit of project *management* and project managers."
5. Action Plan
 - 5.1. The formation of a project team to develop a model a "global citizenship of project management."

Experience, Cooperation and the Future

Action

(i) Derek Blue (Bell Canada) is offering a project office/coordination project.

(ii) "Volunteers" will be requested from the list of those interested (list attached).

5.2. The project team will address the polarization of the group into the following two areas:

(i) How does the "global citizenship" address the needs and contact of "international project managers," i.e., the individuals.

(ii) How does the "global citizenship" address the scope of large international projects and the management of the global projects.

6. Conclusion

"We want a Global Forum as a minimal association and grouping of people for interaction. We do not want a formal association or organization."

7. Contact List

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Group 2: Global Standards

This group addressed this subject of global standards in terms of two questions:

Why Global Standards?

To provide:

- A framework across projects and cultures that project managers can anchor to
- A common basis for international projects and teams
- A framework for exchange of experience
- A hindrance to the development of local qualities
- A common language
- A hindrance to quick (easy) acceptance of information outside the standards.

What Global Standards?

- An assessment structure
- Performance tools
- Measuring the norm
- Offering options
- Knowledge.

Group 3: Guidelines for Globalization

What do we mean by guidelines?

The dictionary definition: criteria, attributes, principles or practices.

Our definition: A standard, a set of goals, criteria, and processes.

Qualities: Guidelines must be: **dynamic**, must be specific to different areas of PM such as planning, human resources and culture, and must follow the PMBOK and other related bodies of knowledge.

The process for global guidelines: first they must be established, then maintained.

Key question: How and by whom?

Key features of a guidelines program:

- Consensus (ISO 10006?)
- Continuity of **developing**, than influencing other non project management groups.
- Sharing
- Denationalized.

How structured?

- A coordinating or management committee
- A professional committee ‘
- National association votes.

Questions for further work?

- Where to go from here?
- Who coordinates?
- Who agrees to standards?
- Who ensures consistency?
- How are they developed?
- How is dynamism ensured?

Project: Global PM Guidelines.

Mandate:

- Identify candidates
- Identify schedule for global team
- Identify appropriate communications
- Identify current guidelines

Experience, Cooperation and the Future

- Identify commonalities and differences at high levels
- Develop agreement upon core guidelines.

Schedule: white paper for next global forum!

Group #4: Framework Issues

There is a need to continue to develop the issues that must be addressed and resolved in order to promote the raised level of awareness required to conduct project management successfully over international boundaries.

What are the venues, organizations, and infrastructure required to accomplish this?

- Establish expectations of successful project management globally.
- Establish expectations and roles of government, corporate and educational institutes in enhancing project management.
- Identify roadblocks to global project management.
- Recognize differences (cultural, economic, political) in global project management.

Framework

- Expectations
- Requirements
- Communication.

Steps Identified During Brainstorming Session:

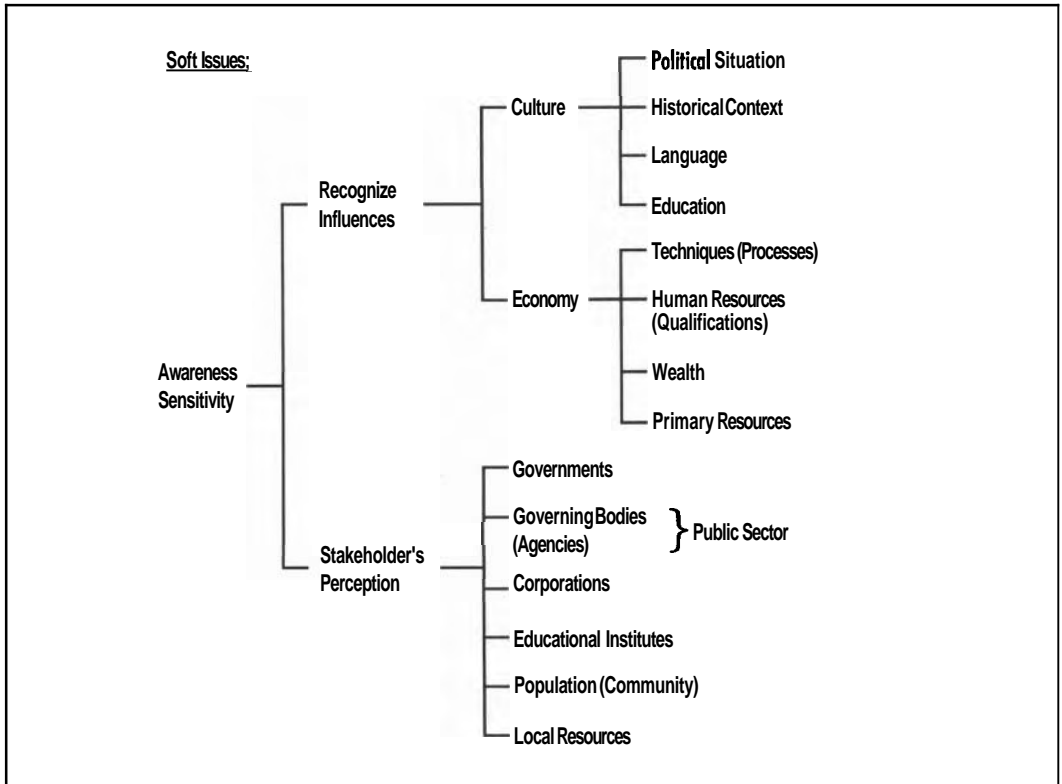
- Develop the profession globally
- Define the profession globally
- Establish international communication via Internet, etc.
- Integrate executive and corporate context across countries (also governments)
- Define Project Manager: recognize that a PM may not always be qualified to practice anywhere
- Define how PMs are perceived in different parts of the world
- Define cultural differences—we could facilitate to bring understanding and to look for cultural similarities
- Gather information for framework on business benefits of PM
- Integrate role of government
- Differentiate critical success factors of PM by cultural context and project typology.
- Look at PM in as is and to be contexts
- Recognize and understand the role of cultural and interpersonal aspects vs. technology aspects.
 - Human factors in PM
 - Political issues

To develop PM globally we must take care of the **soft** issues first.

Key questions:

- What is good global PM?
- What can individuals bring to the PM team (skill, experience, etc.)

Experience, Cooperation and the Future



Contacts:

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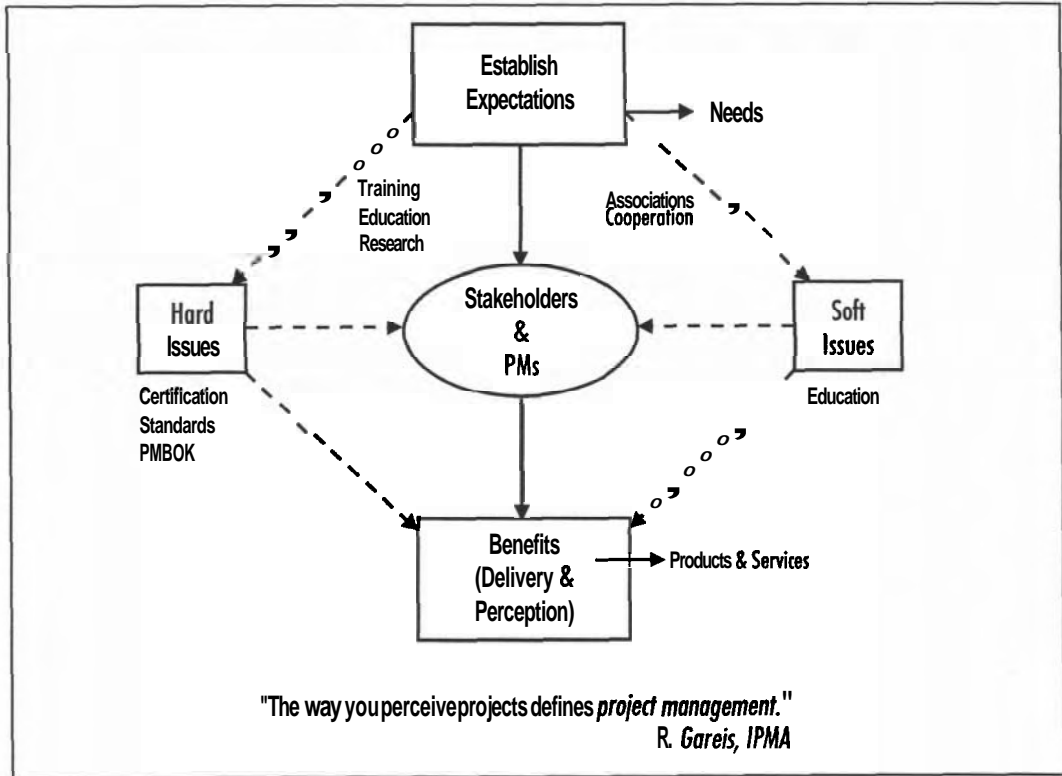
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Group 5: PM Research

First the group was polled to determine the stakeholders: members represented universities (5); PM association members (9), companies (10), and 3 "elders" of the profession.

What are their interests in PM research?

- That it be viable
- That it have discipline and identity
- Cover complex projects



- Representative of members
- Holistic PM approach.

Need to address:

- Metrics
- What research and who?

A PM research Network to do list:

- Use existing PM network **infrastructure**
- Further development of databases
- Use **PM Net/Journal** for dissemination of PM research info and for research publication
- Put representatives from PMI IPMA on each others research committees
- Promote bilateral research cooperation
- Coordination of PM research workshops and conferences.

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UPCOMING EVENTS
LIST OF ATTENDEES



UPCOMING FORUMS ON GLOBAL PROJECT MANAGEMENT: 1997

October 1-2, 1997

Global Project Management Forum, sponsored by the Project Management Institute. Following PMI '97, Chicago, Ill., USA. For information, contact David Pells at dpells@ix.netcom.com or fax +817/323-1532.

November 8-9, 1997

Global Project Management Forum, preceding the Australian Institute of Project Management Conference. Queensland, Australia. Contact Jennifer Swain, +61-7-3846-5858 (tel.), +61-7-3846-5859 (fax), or evc@ozemail.com.au

December 12-20, 1997

Global Symposium on Project Management. Eight related events, including Asia-Pacific PM Forum. Contact Adesh Jain, Project Management Associates, +91-11-646-4481 or acjain@giasdl01.vsnl.net.in

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