

Aftershocks: How Significant Global Events Can Affect the Project Management Profession

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Abstract

During the last two years, a number of significant global events have occurred which might impact the project management profession worldwide. The potential impact of some of those events were discussed in a paper presented by the author at PMI'98 in Long Beach, California. (Pells 1998) That paper also presented a multi-dimensional model for possible use by project management organizations to prepare for and respond to such global issues. A second paper on the subject was presented at the PMI'99 Seminars/Symposium by the author in October, 1999. (Pells 1999) This paper is a continuation of the discussions in those earlier papers. It describes several significant global events that have occurred during 1999, and the possible impact of those events on the project management profession. The multi-dimensional decision-making model presented last year is revisited, and a set of recommendations for the project management profession again presented.

Introduction

Global Tides of Change Continue

During 1999 a number of significant events have occurred around the world that might have an impact on the project management profession, both on a local and global basis. This paper reviews some of these events and trends and their potential impact on the project management (PM) profession. What effect has the War in Kosovo, for instance, had on the PM profession? How do global mergers effect project managers in those companies, or the PM profession in countries where those companies do business? How should political relations between the USA and Russia, between India and China, or between Australia and Indonesia be considered during policy making or strategic planning by the world's professional organizations? These questions and others are explored in paragraphs below.

Recent worldwide events have been separated into the following general categories for discussion:

- ◆ War and Geo-Politics
- ◆ Global & National Politics
- ◆ The Global Economy
- ◆ Mergers & Acquisitions
- ◆ Technology
- ◆ Social Changes
- ◆ Natural Disasters & The Refugee Crisis

In many cases, however, an event or emerging trend primarily associated with one of these categories will directly effect one or more of the other categories. For example, the War in Kosovo has had economic, political and social impacts on a number of countries and industries, and therefore the projects within those areas. Some of those potential impacts and related questions are identified in this paper.

The Future of Project Management

During 1998, a PMI research team under the leadership of Michael Katagiri and Dr. Lewis Gedanski in the United States undertook a project entitled "The Forecast and Assessment of the Future of Project Management Profession and the Project Management Institute." (PMI 1998) That effort was based on questions similar to those upon which this paper is based. That is, what are the potentially positive or negative impacts on the project management profession and on PMI of global trends, both within and external to the profession itself.

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*Originally presented at PMI South Africa International Project Management Conference
Gauteng . Johannesburg . South Africa – November 1999*

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To initiate their research effort, the PMI team hired the services of a futurist firm to prepare an assessment of trends and implications applicable to the project management profession. The results of the study was a report to PMI that presented 96 trends and 101 implications, organized in nine broad categories as follows: globalization, demographic changes, information technology, social values, business practices, human resources, science and technology, construction and design, and markets for project management. The report is an excellent assessment of issues within each of those trend groupings, and their potential impact or implication for the project management profession. While there is some overlap with the issues addressed in this paper, the PMI report provides a more comprehensive assessment of issues affecting individual project managers and the future of the PM profession on a long term basis. Technology developments and social trends are addressed quite thoroughly.

The PMI report is a good first review of global trends affecting the project management profession. As the PMI project team points out in its summary report, the PMI research project raised as many questions as it answered. (PMI 1998) The PMI 1998 research effort was an important first step in developing an ongoing program to identify and assess global trends and their potential impact on the project management profession. However, some global issues were not well addressed in the report, such as political trends and relations and global mergers and acquisitions, which are affecting internal project management practices as well as global economic, political, social and cultural aspects of project management when those mergers or political issues are cross-border. And the impacts vary depending on the countries, industries, organizations and people involved. In addition, the PMI report does not specifically discuss significant global events, their potential impact and repercussions, which can have immediate and significant short-term effects. In some countries and in some industries, the impact of a significant event can be profound. Finally, while the research report calls for more research, it does not provide a decision-making model, which is also needed by professional associations worldwide.

Other Publications and References

Other recent studies related to trends and their impact on the project management profession have been conducted in recent years by other project management professionals. John Tuman presented a discussion of 21st century trends affecting organizations and project teams, and a quite thorough discussion of how to use modern internet and web-based communication technologies for project management. (Tuman 1998) Ashrafi, Wideman and Hartman presented a discussion of the impacts on project management of trends related to technological, organizational, societal, and global economic and political changes in their PMI'98 paper. As they correctly point out, "to manage today's challenging projects effectively, knowledge and understanding of the ongoing revolution in technology, organizational structures, global geopolitical, and economic, social and societal changes will be very useful." (Ashrafi, Wideman and Hartman 1998)

In her PMI'98 paper on megatrends, Dawn Haldane discussed several global trends related to technology development, social changes and changes in global industrial environments. These discussions were directly related to John Naisbett's "megatrend" called "high tech/high touch". (Haldane 1998) Miller and Hobbs briefly explored political and economic environments associated with the implementation of large capital infrastructure projects around the world, including the impact of regulatory changes and technological advances in recent years. (Miller, Hobbs 1998) Zeitoun explored social and cultural issues affecting projects and project management in various locations worldwide. (Zeitoun 1998) In their PMI'97 paper, Price and Mangin described the "changing business landscape and its impact upon project management and how project management must adapt to meet challenges in the twenty-first century." Their paper discussed global competition, information technologies, changing workplace and workforce dynamics, and personal and cultural changes affecting project managers. (Price, Mangin 1997)

Most research and publications by project management leaders and professionals, however, have been directed at issues associated with managing projects, not changes in the global external environment of projects and the profession. On the other hand, a great deal is published on a regular basis related to changing global business, economic, industrial, political and social issues and conditions. Seldom are these changes and trends, however, directly related to the project management profession. For the most part, the references used for this paper are articles in daily US newspapers, *The Economist* or *Financial Times*, political quarterlies such as *Foreign Affairs* or *New Perspectives Quarterly*, CNN Online and the Economist Online. I have simply tried to identify major events, and a few emerging trends, that I think have been significant and might have an impact on our profession.

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War and Geo-Politics – History Repeats Itself

The War in Kosovo which broke into open warfare between NATO and Yugoslavia in March of 1999 has potentially far-reaching political, military, economic and social repercussions. Following are some examples of military events around the world in recent months.

- ◆ NATO launched an air war against Yugoslavia on March 24, 1999. After 30 days of accelerating military actions, the repercussions had become global and significant. Significant war-related events included the downing of a US “Stealth” bomber and resultant loss of technology; accelerated “ethnic cleansing” in Kosovo by Yugoslavian forces with resultant refugee crises in neighboring Albania and Macedonia; accidental NATO bombing of civilians resulting in anti-NATO demonstrations worldwide; accidental NATO bombing of the Chinese embassy in Belgrade resulting in riots at US and British embassies in China and deterioration of Chinese relations with the USA; additional military budgets approved by the US congress; increased orders and contracts for military suppliers in America and Europe; and a dramatic worsening of relations between America and Russia. At the end of September, the Yugoslavian government estimated damage and cost of rebuilding from NATO strikes at \$100 billion.
- ◆ The United States and other allied countries continued the bombing campaign against Iraq during 1999. On August 20, however, the French foreign minister vented long running displeasure with the continuation of the US-led bombing raids. There is widespread criticism in France of the stalemate with Iraq. (France 8-20-99)
- ◆ Nuclear espionage was announced at Los Alamos National Laboratory in the USA, with accusations that a Chinese spy had delivered significant nuclear weapons information to China (Drogan 1999). Subsequent assessments suggest that China is engaged in significant improvements in its nuclear weapons program, based on US technology. (Magnusen 1999, Diamond 1999). U.S. relations with China spiraled down hill following the NATO bombing of the Chinese embassy in Yugoslavia. Relations began to thaw again during the summer. On September 11, President Clinton met with Chinese Premier Jiang Zemin in Auckland in a gesture aimed at improving relations between the countries and to discuss the China-Taiwan problem. (Presidents 9-12-99)
- ◆ Acceleration of the arms race in Asia continued, as first India then Pakistan initiated missile testing in April, 1999, less than one year after detonating nuclear weapons tests in May of 1998. (Filkins 1999, Gannon 1999) Open warfare broke out between India and Pakistan in late May when rebel fighters supported by Pakistan invaded Kashmir and India responded by launching air strikes in the Himalayas. Fighting continued in June and July, despite pledges from Pakistan. Pakistani Prime Minister Sharif stated that he was “trying to avoid nuclear war”. (Pakistani 7-13-99). On August 10, India shot down a Pakistani naval surveillance plane. (Hussain 1999) Although fighting stopped with an Indian army victory in Kashmir, the area was shaken again on October 12 when Pakistani General Pervaiz Musharraf and the Pakistani military took over the country, arresting Prime Minister Nawaz Sharif and members of parliament. General Musharraf declared emergency law and himself the leader of Pakistan three days later. (Schmetzer 1999)
- ◆ In March, both Japan and Germany initiated offensive military actions for the first time since World War II, signaling new phases in their respective national positions and regional responsibilities related to defense and military forces. (Mahoney 1999, Japan 3-24-99) Japan’s parliament passed a new set of guidelines in May that allow Japanese forces to provide greater assistance to U.S. troops in Asia, and give the United States greater access to Japanese airports and seaports. In the country’s annual defense report, issued on July 27, Japan asserted “the right to defend itself including through the use of military strikes to prevent possible attacks.” Japan is undergoing a shifting stance on security and its military. (Japan 7-28-99)
- ◆ U.N. sanctions against Libya were lifted in April when Libya’s leader Colonel Gadhafi agreed to turn over two suspects in the 1988 Pan Am bombing that killed 270 people over Scotland. During the first week in September, the Organization for African Unity held a meeting of 46 heads of African nations in Tripoli, Libya. The purpose of the summit was to discuss “strengthening and amending OAU’s charter with the intention of

achieving African unity.” It was also a show of support for Colonel Gadhafi, as Libya emerges from seven years of isolation brought on by the U.N. sanctions. (African 9-5-99)

- ◆ On April 28, the Clinton Administration in the USA changed its policy on sanctions to countries listed as “terrorist states”. Sales of food, medicine and other humanitarian necessities were allowed to Iran, Libya and Sudan. (U.S. 4-29-99) On May 1, the USA dropped its designation of Iran as the world’s leading state sponsor of terrorism, hoping to ease tensions between the two countries. (U.S. 5-1-99) On May 12, the Clinton Administration announced a new strategy towards Cuba, centered around people-to-people contact. As part of the plan, U.S. authorities were to expand direct charter flights to Cuba, streamline visa applications, and allow U.S. citizens to send more money to Cuban households. (Corchado/Eaton 5-13-99)
- ◆ In June, India and China started mending fences when India’s foreign minister, Jaswant Singh, traveled to Beijing for a meeting with his Chinese counterpart and formally announced, “India is not a threat to the People’s Republic of China and we do not treat the PRC as a threat.” (Kazmin 1999) On August 25, Russian President Boris Yeltsin met with Chinese President Jiang Zemin and the two leaders signaled their desire to fore a closer alliance to counter-balance U.S. global clout. Mr. Jiang stated, “The process of forming a multi-polar world is difficult, but it has become an irreversible trend.” (Russian 8-26-99)
- ◆ In late June, an unprecedented summit involving the leaders of 15 European and 33 Latin American and Caribbean nations met in Rio de Janeiro. The United States was not invited. The purpose of the summit was an effort to counter U.S. dominance in trade and political affairs. (Summit 6-30-99)
- ◆ North Korea once again stirred up trouble in Asia when North Korean ships intruded into South Korean waters in June. In July the United States and South Korea warned North Korea not to test any more long-range missiles. At the end of July, the USA and Japan announced that they have agreed to collaborate with South Korea on a joint response, if North Korea tests another long-range missile. (US 7-29-99) To counter North Korean threats, South Korea and Japan moved closer than anytime since World War II, leading to a dramatic change of course in defense strategy and diplomacy for both countries. In early August, the Japanese and South Korean navies ran a six-day joint naval exercise. South Korean military staged a civil emergency drill in Seoul on August 17, simulating a chemical attack on the capital, while North Korea accused the USA of stirring up discord. (S. Korean 8-19-99). China got into the act at the end of August, inviting South Korea to military talks for the first time ever, indicating that Beijing believed that the escalation in Korea was providing Japan with an excuse for increasing its military expenditures as well as military ties with the USA. (Chinese 8-22-99). North Korea finally succumbed to international pressure on September 12, agreeing to freeze its nuclear testing program, clearing the way for improved relations with the USA and its Asian allies. (Drozdiak 9-13-99). This was followed on September 17 by President Clinton in the USA lifting restrictions on trade, travel and banking with North Korea, sanctions that have been in place for fifty years, rewarding North Korea for agreeing not to test missiles that could reach Hawaii and Alaska. (Clinton 9-18-99)
- ◆ On July 12, Taiwan announced that it was abandoning the “one China” policy, provoking an immediate angry reaction from Beijing. Chinese leaders immediately warned Taiwan that it was courting a “monumental disaster” by taking this step, viewed as just short of declaring independence. (Jones 7-14-99). Chinese and Taiwanese jets started flying sorties in July along the center of the narrow strait of water that separates the two sides, representing the sharpest military escalation in the area in years. (Pornfret/Mufson 1999). On August 4, China warned the US Congress against supporting any moves by Taiwan toward independence and demanded that legislation pending in the USA for increased military aid to Taiwan be shelved. (China 8-5-99). Taiwan started promoting an anti-missile defense system in late August.
- ◆ On July 27, the USA and Russia announced a new “hot line” between the US State Department and Russia’s Foreign Ministry, “to avoid confusion and miscommunications in the future”. This will be the second direct line of communications between the US White House and the Kremlin. (US 7-27-99) Meanwhile, Clinton and Yeltsin reached agreement on arms control, while the SALT II treaty was rejected by parliaments in both countries.

- ◆ Continuing bloody conflict on the Ethiopian border with Eritrea in Africa, where hundreds of thousands of soldiers have been killed in the last twelve months. (African 4-2-99) Civil war in the Congo continued, although rebel factions agreed to sign a cease-fire at the end of August. (Fisher 9-1-99). On July 14, U.S. Secretary of State Albright pledged greater U.S. effort to support peace efforts in Sudan and other war-torn countries in Africa. (Albright 7-14-99) In Sierra Leone, rebels continued to raid villages and massacre anyone who voted for President Kabah in the country's first democratic elections in 1996. (Menaker 1999) Fighting broke out between Rwandan and Ugandan troops in August 15, over disagreement on how to end the civil war in Congo. (Rwandan 8-16-99)
- ◆ On August 30, residents of East Timor voted overwhelmingly for independence from Indonesia. Armed militia and Indonesian soldiers responded by sacking the country in a pogrom of looting, terror and murder during the first two weeks of September. Finally responding to international pressure, the Indonesian government agreed to allow a United Nations peace keeping force, led by Australia, into East Timor to re-establish order and allow the return of thousands of refugees. The multi-national U.N. force arrived in East Timor on September 20, 1999. (Troops 9-21-99)
- ◆ On September 4, Israeli and Palestinian leaders signed an historic peace accord, the breakthrough land-for-peace agreement. U.S. Secretary of State Albright flew to Cairo to witness the signing of the peace agreement by Israeli Prime Minister Ehud Barak and Palestinian leader Yasser Arafat. (Schweid 1999)
- ◆ Also on September 4, in a significant change of heart, Greece told its EU partners that it no longer objects to long time rival Turkey joining the European Union. (Greece 9-5-99)
- ◆ In September, in another sign of increasing multinational peacekeeping actions, U.N. Secretary-General Kofi Annan called for a 6000 member U.N. military force for Siera Leone "to safeguard the nation's fragile peace accord." (U.N. 9-29-99)
- ◆ Wearing by seven years of bloody fighting, Algerians overwhelmingly embraced an Amnesty Plan for Islamic rebels in a referendum on September 16, 1999. The plan was advanced by President Bouteflika to end the vicious underground war that has cost an estimated 100,000 lives in Algeria. (Algerians 9-17-99)

What are the repercussions of these regional conflicts on the project management profession? Certainly any project or organization located in those regions is affected, either positively or negatively. Organizations doing business in those regions or with other organizations that are involved can be effected as well. The defense industries in many countries appear to be growing again after a decade of downsizing, leading to an increased demand for project managers and project management expertise in those sectors. (Khan 1999) Relations between America and Europe on the one hand and Russia and China on the other deteriorated, (Yeltsin 4-30-99) with many economic and political repercussions still to be worked out. Relations between Europe and the United States greatly improved during the NATO activity in Kosovo, after months of deteriorating relations due to trade disputes and political differences. Cooperation within the project management profession between America and Europe should be positively viewed (for example, discussions between PMI and IPMA).

Global Politics – The World is A Stage

Within individual countries, significant political events occurred that could shape future events worldwide, including the following:

- ◆ King Hussein of Jordan died in February and was replaced on the throne by his son, Prince Abdullah, changing the perception of political stability and balance of power in the Middle East. This instability did not materialize, however, and King Abdullah established himself quickly as a capable Arab leader. (Landers 1999) The transition of leadership to a younger generation in the Arab World continued in March with the death of the

Emir of Bahrain, who was succeeded by his son, Sheik Hamad bin Issa, 49. (Jahl 1999) On July 22, King Hassan II, ruler of Morocco for 38 years, died at age 70. King Hassan was succeeded on the throne by his son, Crown Prince Sidi Mohamed, 36. President Clinton and first lady Hillary Rodham Clinton from the United States attended the state funeral on July 26, reflecting King Hassan's longtime status as a valued American ally in North Africa. (Moroccan 7-26-99)

- ◆ On February 27, democratic elections were held for the first time in Nigeria, Africa's most populous country with 108 million inhabitants. President-elect Obasanju stated in March that his country "is headed firmly toward democratic rule, privatization of its huge oil industry, and an end to decades of official corruption and severe human rights abuses." (President 3-30-99)
- ◆ In March, reformists won seats in major local elections in Iran, Iranian President Khatami met with Pope John Paul II in Rome, and the USA dropped its designation of Iran as the world's leading state sponsor of terrorism on April 30, 1999. (Slavin 1999)
- ◆ On April 1, Native American's formed a new country of Nunavut in northeastern Canada, after approval by the Canadian parliament. The country will have wide autonomy, and mining and mineral rights. (Courcoi 1999)
- ◆ In April, the entire European Commission resigned following the publication of a scathing report, which led to devaluation of the Euro and "bureaucratic crisis" among EU countries. Within two months, however, the war with Yugoslavia brought European countries and leaders together with the USA to address a common crisis. (A new agenda 3-22-99) In September, a new European Commission was finally approved with new commission President Romano Prodi, former Italian Prime Minister, pledging to "bring his administration closer to the union's citizens and to cooperate fully with the EU Parliament." (New 9-16-99)
- ◆ Independent legislatures were established in Scotland and Wales on May 6, 1999 for the first time in 300 years, with serious discussions increasing about the future political structure of England and the United Kingdom. (Barlow 1999, Scotland 5-7-99)
- ◆ On May 17, Ehud Barak, a much-decorated former general who had pledged to revive the Middle East peace process, swept to a landslide victory in Israel over Prime Minister Benjamin Netanyahu and his right-wing Likud Party. Mr. Barak, a protégé of the late Israeli Prime Minister Yitzhak Rabin, vowed to pursue a final peace settlement with the Palestinians, reach agreements with Israel's Arab neighbors, and slow the growth of Jewish settlements in the West Bank. (Hockstader 1999)
- ◆ In Columbia, the government's war with guerillas continued to ravage the country in 1999. In May, Colombian President Andres Pastrana said he was willing to carve out a "new safe haven for leftist guerillas if it will advance the cause of peace." (Robberson 5-11-99) Columbia's defense minister then resigned on May 26, along with 47 other military officers, in protest to the president's decision to give the leftist guerillas unlimited permission to occupy a Switzerland-sized safe haven. The resignations plunged the Colombian government into crisis. (Robberson 5-27-99) Violence erupted again on July 8 when rebel forces launched a bloody swath of destruction across a third of the country, on the verge of formal peace talks. The offensive was the largest by the Revolutionary Armed Forces of Columbia (FARC) since the group joined forces with the National Liberation Army last August. (Robberson 7-13-99) Having boasted one of the strongest economies in Latin America just two years ago, Columbia today is facing its worst slump since the Great Depression. The onslaught by leftist guerillas is widely blamed for bringing investment to a virtual standstill. Petroleum exploration and production, the largest legal source of foreign income, have been severely disrupted by rebel attacks. The peace process has become a very important factor for Colombian economic recovery. (Robberson 8-3-99) In September, following a trip to Washington, DC, President Pastrana announced a new "Plan for peace, prosperity and the strengthening of the state." At the hear of the new plan was a request for up to \$1.5 billion in military aid from the USA to help Columbia's armed forces in the fight against leftist guerillas who now control over 40% of the country, including many drug-producing areas. (Columbia 9-24-99) A week later, the rebels agreed to restart peace talks.

- ◆ Venezuela, Columbia's neighbor, fell into political turmoil in August when a newly formed "constitutional assembly", dominated by supporters of President Hugo Chavez, issued a decree that banned the Venezuelan Congress from passing new laws and severely limited its other legislative functions. The new assembly was created to re-write the country's constitution, but Mr. Chavez has insisted that it has broader powers. (Power 8-30-99) On August 30, the Constitutional Assembly stripped the opposition-controlled Congress of its last remaining powers. The assembly said it took the action because Congress was interfering with the assembly's main work: writing a new constitution for Venezuela and reforming corrupt public institutions. (Venezuelan 8-31-99) The Venezuelan economy was already suffering its worst recession in decades. The political turmoil at the end of August pushed the Caracas stock market to new lows, scaring off investors, and further driving down Venezuela's economic prospects. (Political 9-2-99)
- ◆ Meanwhile, Ecuador, Columbia's other neighbor, struggles through its worst economic crisis in seventy years. In late August, the country announced it was defaulting on its \$13 billion foreign debt. Interest payments totaling \$98 million on Ecuador's \$6 billion "Brady bond debt" fell due on August 31. The country was unable to pay.
- ◆ On June 16, Thabo Mbeki became South Africa's second post-apartheid president, taking over from Nelson Mandela. Mr. Mbeki has indicated he will shift the focus of government away from reconciliation toward helping the millions of impoverished South Africans. (South Africa 6-17-99)
- ◆ On July 1, the German parliament met for the last time in Bonn before moving the country's capital to Berlin. In his address to parliament, former Chancellor Helmut Kohl appealed to the nation to remain committed to the drive for European unity. (Bermanys 7-2-99) The move from Bonn to Berlin is expected to take two months, for 699 parliament members, their 3400-strong staff and 6000 government officials. The transfer of parliament's 4,000 offices alone meant moving 24 miles of files, 28,000 cartons of books, and 30,000 pieces of furniture and 1300 computers. (German 7-3-99)
- ◆ In Iran, 25,000 students and supporters demonstrated in the streets of Tehran on July 11, protesting a violent police raid on a Tehran University dormitory. It was the angriest protest since the Iranian revolution of two decades ago, presenting a test for President Khatami, the moderate leader who holds broad popular support but who has yet to consolidate control of Iran's fractured political system. In the USA, Iranian immigrants protested in Dallas, Houston and other US cities. (Iran 7-12-99) Violence escalated two days later.
- ◆ In Japan, after years of controversy and debate, parliament voted on July 22 to make Japan's Rising Sun flag and Anthem to the Emperor national symbols again. (Japan 7-23-99) In June, Mr. Taku Yamashiki, a candidate for leadership of the ruling Liberal Democratic party, called for a shift in Japanese security policy from its stated "one-country pacifism" to active participation in multi-national peacekeeping efforts. (Nakanto 1999).
- ◆ In the Philippines, protests were launched in August after Philippine President Joseph Estrada announced plans to revise the Philippine constitution "to remove constitutional provisions that ban foreigners from owning land and limit foreign ownership of businesses in key sectors to 40 percent." Critics feared the planned economic amendments might lead to political changes once the constitution is opened to revision by members of congress. The proposed changes are generally backed by big business, but smaller companies fear foreign competition. (President 8-21-99)
- ◆ In Russia, President Boris Yeltsin replaced his Prime Minister in early August, naming Vladimir Putin, the head of federal security services, to be his fourth Prime Minister in 17 months. The move increased the perception of political instability in Russia on the eve of national elections scheduled for 2000. (Nichols 1999) Instability mounted in Russia after a series of bomb explosions in early September demolished apartment complexes in Moscow and two other Russian cities, killing hundreds of Russian civilians. Blaming separatist rebels in Dagastan and Chechnya, Russia launched a major military campaign in the southern Caucasus region. On September 23, "waves of Russian jets fired rockets at factories, oil refineries, television stations, residential

areas, and a busy marketplace. Thousands of civilians fled Grozny. (Filipov 1999) On October 1, Russia announced that it “no longer recognizes the democratically elected Parliament of Chechnya”, while the Russian military said its forces would establish a security zone in the breakaway republic. (Russia 10-2-99) Fighting in the region continued in October as Russian troops advanced on the capital, Grozny.

- ◆ Meanwhile, Europe got smaller on August 14 as a new bridge between Denmark and Sweden was inaugurated. The heirs to the Swedish and Danish thrones exchanged kisses in the center of the bridge that physically links the two countries for the first time in history. The 10-mile, \$2.6 Billion project also includes a tunnel. (Denmark 8-15-99)
- ◆ In September, the world’s largest democratic elections were held in India, in a five-phase, staggered voting process that ended on October 5. Approximately 600 million Indians cast ballots for the federal legislature. A coalition led by the ruling Bharatiya Jamata Party (BJP) headed by acting Prime Minister Atal Bihar Vajpayee was returned to power with the help of 21 parties in a campaign alliance. The results appear to give India its first stable government in three years. (Hindu 10-4-99)
- ◆ On October 13, the U.S. Senate rejected the global Comprehensive Nuclear Test Ban treaty, dismayed and angering leaders and politicians around the world. Foreign policy analysts said this action would certainly “undermine” U.S. leadership in the global arena and hasten the unraveling of the disarmament policies that the USA has promoted since the end of the Cold War. (Pine 1999)
- ◆ Following elections in Indonesia that elected representatives to the 700-member Peoples Constituent Assembly, a Muslim cleric was elected President of Indonesia by that assembly on October 20. Greatly surprising the outside world, the election of Abdurrahman Wahid, a respected but frail Muslim cleric, over highly favored Megawati Sukarnoputri, daughter of the country’s founder and most popular candidate during parliamentary elections, set off a series of riots throughout the island nation. Ms. Megawati, a close second in voting, will become the nation’s vice president. Mr. Wahid, 59, is the moderate leader of the largest Muslim organization in the world’s most populous Muslim country. The election was Indonesia’s first democratic transfer of power in the country’s history. (Lamb 1999)

What are the possible implications for project management organizations or project managers resulting from these events? New self-governance in Scotland and Wales, and questions about England, suggest that local issues may become more important to professionals in those regions and that independent project management organizations may be established in those countries in the future. In addition, any business relationship with organizations in those regions will have to accommodate the local political changes. Any one of the above political events has a set of possible impacts, repercussions and considerations for the project management profession in those areas.

The Global Economy

The global economic crisis that began with the collapse of the Thailand currency and economy in 1997, which led to major currency and economic crises throughout Asia in 1998, continued in late 1998 and early 1999. This global “economic contagion” reached Brazil in January, 1999, leading to a devaluation of the Brazilian real and bringing Brazil’s economy to the verge of collapse. Meanwhile, the US economy continued to grow rapidly, led by a surging stock market. By early 1999, it seemed that the US economy was successfully offsetting the negative global economic pressures. The global economy began to stabilize, then grow again worldwide. The strength of the US economy has been one of the biggest and most significant trends during this period. By September it seemed clear that the Japanese economy was rebounding and most Asian economies were growing again. Here are some global economic stories of recent months:

- ◆ In January amid much fanfare, the Euro was launched as a new global currency in Europe. After starting strongly, however, the Euro began to slide in March and continued to fall against the US dollar and other currencies after the NATO war with Yugoslavia began. (Roughton 1998, Belton 1999) The Euro, however, has

now been used by countries in Central and West Africa as a backing for treasury bills (national debt) as a way to increase confidence and security for investors. An unexpected result has been an increase in trade between these West African countries and Europe. (Kibuzo 1999)

- ◆ Brazil, the world's ninth largest economy, effectively devalued its currency on January 13, 1999, sending the world's financial markets into a temporary tailspin, suggesting that the global impact of the Asian financial crisis of 1998 was not yet complete. (Dodge 1-14-99, Dufner 1999) Markets rebounded, however, two days later as the crisis was not seen as long lasting or as serious as previously thought. (Deener 1-16-99) By April, financial markets in Brazil were surging again as the country appeared to be moving quickly towards economic recovery.
- ◆ World Trade Organization (WTO) negotiations were in the headlines for several months, as Europe and the USA began a trade war and China continued its efforts to join. (Wiseman/Schmit 1999)
- ◆ The Dow Jones Average hit the 10,000 point milestone on Wall Street on March 16, 1999, (Deener 3-17-99) then continued upward to smash through 11,000 on Monday, May 3, 1999. (Deener 5-4-99) In March, analysts in the USA stated that the United States is virtually the only major industrial economy that is experiencing strong growth, and that the US economy is propping up the rest of the world. (Dodge 3-17-99)
- ◆ Meanwhile, land prices in Japan continued to sink for the eighth straight year. (Magnier 1999) The prolonged recession in Japan continued into 1999. On March 31, Mitsubishi Electric Corp. announced that it will eliminate 14,500 jobs worldwide, with many of those cuts in Japan, adding to mounting unemployment problems. Still the world's second largest economy, Japan has seen falling asset prices, a banking crisis, declining corporate profits, and rising government debt bring the economy down and keep it down. Even a trillion dollars of investment in public works, tax cuts, bank bailouts and shopping vouchers have failed to bring the Japanese economy back, confounding economists and government leaders. (Brenner 1999)
- ◆ At the end of April, the IMF published favorable forecasts for South Korea, Thailand and Indonesia. Stock markets in emerging markets were also rebounding, up 63% in Brazil, up 36% in Russia, up 32% in Korea, and up 20% in Jakarta. (Miller 1999)
- ◆ Mexico's economy continued to grow, based on the country's proximity to the USA and growing trade between the two countries. On Monday, May 3, 1999, the Mexican IPC stock market index closed up 164.69 points or three percent to set a new record. Meanwhile, discussions continued in Mexico City about adopting the US dollar as the Mexican currency. Another initiative was launched to make silver Mexico's national currency. Privatization of major Mexican industries continued, with more regions of Mexico benefiting from positive business and economic conditions. (Corchado/Iliff 1999)
- ◆ On July 6, the price of gold on both cash and future markets tumbled to a 20-year low after Britain kicked off the first in a series of auctions planned for selling more than half of the country's gold reserves. In London the gold price closed at \$256.10. (Gold 7-7-99) In South Africa, where a South African Gold Crisis Committee had been established in 1998, Placer Dome of Canada and South Africa's Western Areas announced a 40% workforce reduction at their gold mining joint venture in South Africa on August 8. Following the announcement of gold sales by European central banks, South African employers and trade unions warned that an additional 80,000 jobs are at risk in the South African gold industry. The number of people employed in South Africa's gold mining sector has already been reduced by 50 percent (300,000 jobs) in the past decade, primarily due to low gold prices. (Mallet 1999)
- ◆ On August 20, the largest trade deficit in history was projected for the USA. During the first half of 1999, the U.S. trade deficit was running at a projected \$236 billion, 44% above last year's record, fueled by the surging U.S. economy and worldwide slump elsewhere, triggered by the Asian economic crisis. Leading U.S. economists told the U.S. Trade Deficit Review Commission that "current trends are not sustainable" and "could

represent a threat to the U.S. economy.” MIT professor Lester Thurow argued that the U.S. could see a situation of “capital flight”. (Aversa 1999)

- ◆ On August 23, the Dow Jones Industrial Average soared to a new record of 11,299 in the United States, on the eve of the Federal Reserve meetings in New York. The Dow was up 23.1 % for the year, more than double the prediction for the entire year. The runup in the NASDAQ was even stronger. (Deener 8-24-99)
- ◆ On September 13, the Yen surged to a three-year high against the U.S. dollar. “It’s finally starting to look like the economy’s really back on track. Big investors are lining up to get into the Japanese stock market. And the jump in demand for stocks has generated demand for Yen.” (Zaun 1999, Beattie 1999)
- ◆ On September 26, the International Monetary Fund (IMF) unveiled a major debt relief initiative aimed at supporting “deeper, broader and faster debt relief” for the world’s poorest countries. The new initiative, called the Heavily Indebted Poor Countries (HIPC) Initiative, will provide debt relief to 36 nations and is intended to erase up to \$100 billion in debt, allowing the countries to commit scarce resource to poverty, health and education. (Crutsinger 1999)
- ◆ On September 28, gold zoomed to \$330 an ounce on the New York Mercantile Exchange after the announcement in Europe that the 15 central banks in the EU would limit their bullion sales for the next five years. The recent prices rises suggest that a 13-year slump in gold prices may be over. (Rangel 1999)
- ◆ On September 29, President Clinton pledged to cancel \$5.7 billion debt that 36 poor countries owe to the United States,, provided they channel the saved money into programs for education, health and development. (Clinton 9-30-99)
- ◆ In September, after months of stormy relations, China and the USA resumed talked related to China’s entry into the World Trade Organization (WTO). The talks were suspended in May, before the end of the war in Kosovo. (de Jonquieres 1999)

The impact of economic trends and conditions on the project management profession can be dramatic. The introduction of the Euro in January offers a new global currency for any and all transactions (PMI, for instance, must now accommodate Euro conversion for payment of dues and prices.) Professionals in the financial sector are directly affected by the Euro. In addition to more jobs and interest in project management resulting from the surging US economy, another impact is that some pressure has been taken off of some U.S. government agencies to downsize and save money. Most US firms support China’s efforts to enter the WTO, while many Chinese organizations oppose the move. How would China’s entry into the WTO affect projects in China involving foreign companies, or projects in other countries aimed at producing goods to be traded with China? The impacts could be significant. Japan’s economic troubles have increased the demand for western-style project management, as companies seek efficiencies and more market-responsive processes. In Mexico, demand for American-style project management grows along with the economy.

Merger Mania Goes Global

Merger mania continued in the USA, with mergers and acquisitions continuing at a record pace. Global mergers spread to Europe and Asia in 1999, as several large telecommunications and industrial organizations announced plans to join. Here are some major facts and examples:

- ◆ By the end of 1998, 7758 mergers had been announced involving US firms. They included 939 in computer software, supplies and services; 433 in banking and finance; 297 in retail; 252 in insurance; 236 in communications; 222 in electric, gas, water and sanitary services; 197 in drugs, medical supplies and equipment; 164 in broadcasting; 61 in oil and gas; and 14 in autos and trucks. (Dworkin 1999)

- ◆ The largest US mergers in 1998 included Exxon's purchase of Mobil for \$79.3 billion; SBC Communications' purchase of Ameritech for \$61.4 billion; British Petroleum's purchase of Amoco for \$56.5 billion; Bell Atlantic company's purchase of GTE Corp. for \$52.8 billion; NationsBank Corp.'s \$43.2 billion merger with BankAmerica Corp.; AT&T's purchase of TCI for \$37 billion; \$36 billion merger of Travelers Group with Citicorp; the \$31 billion merger of Norwest Corp. with Wells Fargo; Daimler Benz AG's purchase of Chrysler for \$31.2 billion; and the \$21 billion merger of Berkshire Hathaway Inc. with General Re corp. (Dworkin 1999)
- ◆ On January 15, the purchase of AirTouch Communications in the USA by Vodafone Group PLC of the UK for \$56 billion was announced. (Knox 1999)
- ◆ On February 1, 1999, Societe Generale in Paris announced that it is buying Paribas for \$17.07billion in stock to combine two French banking powerhouses. A month later it became a three-way merger, as Banque Nationale de Paris joined the other two banks to propose the creation of the largest banking group in France. (Graham 1999)
- ◆ A revolution in Italian banking was unleashed on March 21 when the country's two largest banking groups announced simultaneous moves to combine with two other large Italian banks. UniCredito Italiano, the country's third-largest banking group launched a share-exchange offer for Banca Commerciale Italiana, its Milan rival. San Paolo IMI, the country's largest banking group announced plans for a share-exchange merger with Banca di Roma, in a huge deal. (Betts 1999)
- ◆ On Monday, March 22, the French conglomerate Vivendi SA announced plans to buy U.S. Filter Corp. and its Culligan brand for \$6.2 billion to combine two of the world's leading water treatment businesses and give Vivendi a stronger foothold in the United States.
- ◆ Also on March 22, four Canadian phone companies agreed to a \$1.9 billion merger, creating a single competitor for all of Eastern Canada and the country's third-largest phone service provider. (Four 3-23-99) On March 24, Ameritech Corp., the U.S. local-phone company set to be acquired by SBC Communications Inc., said it will buy a 20 percent stake in number one Canadian carrier Bell Canada for \$5.1 billion Canadian, to take advantage of deregulation. (Ameritech 3-25-99)
- ◆ On March 27, Renault SA of France signed a \$5.4 billion agreement to become the largest shareholder in Nissan Motor Company in Tokyo to create the world's fourth largest automaker, although both companies stressed that the deal was not a merger. (Sugawara 1999)
- ◆ On March 31, the Board of BP Amoco PLC, which became the world's third largest oil company after the 1998 merger of British Petroleum and Amoco in the USA, approved plans to buy Atlantic Richfield Co. (ARCO), the eighth-largest U.S. oil company, for \$25.6 billion. (White 1999)
- ◆ On April 21, Telecom Italia formally agreed to merge with Deutsche Telecom in a deal that values the Italian phone company at \$74.3 billion, reflecting rising competition in the European telecommunications industry. (Rosenbush 1999)
- ◆ In June, Norsk Hydro, Norway's second largest oil company, won approval to merge with Saga Petroleum, the country's third largest, against a rival offer from Elf Aquitaine, the French oil group. (Skold 1999) On July 5, Total Fina SA, France's largest oil company, offered \$43 billion in stock for Elf Aquitaine SA. Approved in September, the buyout created Europe's third largest oil group and the world's fourth largest. The final offer was \$54.2 billion. (Total 9-14-99)
- ◆ On June 22, the Japanese government announced that it will welcome foreign companies that "break with the country's tradition" and make hostile bids for Japanese groups. The announcement by Kaoru Yosano, Japanese Trade Minister, supported the controversial move by Cable & Wireless, the UK telecoms group that is taking

control of IDC, the Japanese telecoms company, after a bitter battle with NTT, its largest Japanese rival. The deal is believed to be the first contested takeover in Japan. Mr. Yosano insisted that the Ministry of International Trade and Industry (MITI) remained “firmly committed to implementing corporate reform”. (Tell/Montagnon 1999)

- ◆ On August 4, Dow Chemical Co. announced that it was buying Union Carbide Corp. to create the world’s second-largest chemical business behind Dupont. The move was intended to strengthen Dow’s perch in a sluggish chemical market beset by depressed prices due to a drop in demand in struggling overseas economies. About 2000 jobs will be cut after the \$9.3 billion deal. (Hyde 1999)
- ◆ On August 10, Alcan Aluminum of Canada, France’s Pechiney and Switzerland’s Algroup announced plans to combine to form the world’s top aluminum maker. (Webb-Vidal 1999) This was followed on August 12 by an offer by Alcoa to purchase Reynolds Aluminum for \$5.6 Billion in order to stay number one. (Kim 8/99)
- ◆ On August 20, three Japanese banks announced a broad alliance that would create the world’s largest banking group, with assets of well over one trillion dollars. Officials of Dai-Chi Kango Bank Ltd., The Industrial Bank of Japan Ltd., and Fuji Bank Ltd. Confirmed the broad alliance plans, to be implemented over the next two years. (Three 8-20-99) The merger would speed up consolidation in the Japanese banking industry, which has already seen the number of big banks fall from 21 to 16 in the past two years. In asset terms, the group would leapfrog Deutsche Bank as the world’s largest financial group. (Harney/Tett 1999)
- ◆ In August, after Brazil’s two dominant brewers decided to merge creating a powerhouse that would control 70% of the domestic beer market, Brazilian authorities began to promote the consolidation of Brazil’s four major airline companies into two major competitive carriers. (Fritsch 8/99)
- ◆ On September 20, Swedish-Finnish bank MeritaNordenbanken sprang a \$3 billion takeover bid on Norway’s number two bank, Christiana Bank. A Merita-Christiana fusion would result in the creation of a Nordic financial titan with assets of 123 billion euros (\$127.9 billion). The enlarged banking group would have a 10 percent market share in Norway, 40 percent in Finland, and 20 percent in Sweden. (Merita 9-20-99)
- ◆ On September 24, the UK banking industry was shaken up when the Bank of Scotland launched an unsolicited \$34.2 billion bid for National Westminster Bank, a financial powerhouse four times its size. A Bank of Scotland – NatWest marriage would be a major spur to British banking consolidation, which is still in its nascent stages. The combined bank would be the second largest bank in England. (Natwest 9-24-99)
- ◆ In a stunning announcement, MCI/Worldcom announced a merger with Sprint in a \$120 Billion merger, the largest corporate combination in US history, creating the second largest long distance carrier in the USA and a global player in the world telecoms industry. Finally approved by the boards of both companies on October 4 at \$108 billion, the deal provides MCI Worldcom with Sprint’s nationwide wireless operations. There merged company will be broad – able to sell local, long-distance and wireless services, along with high-speed internet access. The merger would cement MCI Worldcom’s position among the few large players – such as AT&T Corp., Bell Atlantic and British Telecommunications PLC – expected to dominate global communications in the future by offering a full array of services in “bundles” to businesses and consumers. (Holson/Schiesel 1999)
- ◆ On October 14, DaimlerChrysler Aerospace and France’s Aerospatiale-Matra announced they will merge to created Europe’s largest aerospace and defense group and the world’s number three player. The deal marked a breakthrough in the long-running plans to form a single European aerospace and defense company. The new firm, to be known initially as European Aeronautic Defense and Space Company (EADS) will have annual sales of 21 billion euros (\$22.6 billion) and will overtake British Aerospace as the European market leader. (Dasa 10-14-99)
- ◆ Also on October 14, Japan’s Sumitomo Bank and Sakura Bank announced plans to merge, forming the world’s second largest bank. The announcement came just two months after three other major Japanese banks

announced merger plans to create the world's biggest bank. This latest merger is seen as a rescue of Sakura, which has a relatively high level of problem loans and fragile financial health. Before the actual merger, the banks said they will forge alliances in all areas and integrate computer systems. The creation of the new bank will lead to a 30 percent reduction in their combined work force. (Sumitomo 10-14-99)

- ◆ On October 21, German telecoms and engineering company Mannesmann AG announced that it had agreed to acquire Orange Plc, the third largest British mobile phone group, for approximately \$33 billion. (A Mobile 1-22-99)
- ◆ In a wave of consolidation in the German power industry, Veba and Viag, the country's second and third biggest power groups, unveiled plans to merge in October. On October 21, RWE, Germany's largest energy group, was expected to announce plans to merge with its rival, VEW. (Taylor/Atkins 1999)
- ◆ Also on October 21, Bank of the Philippine Islands and Far East Bank, two of the Philippines' largest banks, agreed to merge, creating the country's largest bank and one of the 10 biggest banks in the region. (BPI 10-21-99)

These are just a sampling of the mergers and acquisitions announced so far in 1999. Major mergers continued in the USA, with AT&T and Microsoft teaming up for AT&T's acquisition of MediaOne Group, the fourth-largest cable company in the USA, for \$54 billion in late April. SBC Communications Inc. the No. 2 U.S. local telephone company teamed up with Telefonos de Mexico, the largest phone company in Mexico, to buy Cellular Communications of Puerto Rico in early May. Honeywell and Allied Signal agreed to merge in a \$14 billion stock swap on June 7, to become a \$24 billion industrial powerhouse that makes everything from aircraft landing systems to home thermostats. (Knox 1999) Smaller mergers occurred in many industries and markets worldwide.

The volume of cross-border mergers and acquisitions in the first nine months of 1999 boomed to \$608 billion, already exceeding mergers for the whole of 1998 (\$544 billion), which was itself a record. UK firms were the purchaser in deals worth \$202 billion, U.S. companies were second with \$113 billion, French firms were third at \$74 billion, and Germany fourth at \$45 billion. In the first three quarters of 1999, EU companies made cross-border acquisitions totally \$430 billion, compared with \$203 billion in the same period last year. The telecoms/postal industry was the most active sector in the global mergers and acquisitions market, with deals worth \$108 billion during this period. The Chemicals industry was also active with firms completing deals worth \$75 billion. The food, drink and tobacco (\$30 billion), oil and gas (\$17 billion), and banking and finance (\$14 billion) sectors were the next most active. These figures were from the latest KPMG corporate survey. (Cross-border 10-22-99)

Each of these changes potentially affects the projects underway within those organizations, and in some cases entire industries, and the project management professionals employed there. Single organizations are becoming more powerful and influential in many industries, requiring that they be considered as key stakeholders by PMI and other professional associations. Partnering, contracting and project teaming will be affected in many organizations and areas. Many of these large new organizations are global players, sponsoring or participating on projects in many different markets and locations.

Technology Leaps and Bounds

Technological changes have continued at a rapid pace worldwide. Some recent announcements of possible interest to the project management profession include the following:

- ◆ Digital communications drives the merging of telecable and telecommunications technologies, industries and organizations. By late 2000, the cable industry in the USA will have largely finished the \$20 billion job of rewiring cable systems, giving 96 million homes in the USA the potential to receive digital services offered through fiber-optic wires. Cable and telecoms companies are merging rapidly, as "internet telephony" becomes a reality and a "flood of new broadband services that will eventually overtake conventional TV" are developed.

“The new world of communications promises to change the landscape of society. It really is ushering in a new age.” (Cable 4-5-99) E-commerce continues to grow rapidly worldwide. The global consumer market for products and services ordered over the internet may balloon to \$380 billion by 2003, up from an expected \$31.2 billion for 1999, according to a forecast on October 12 by Dataquest, a California-based research firm. (Goldstein 1999)

- ◆ Digital Pulse Technology, developed in part by an individual inventor in Alabama and a federal laboratory in the USA, promises to revolutionize communications once again. Related uses include cell phones which could be wristwatch sized, home radar that can distinguish animals from persons, positioning devices that can track locations to within inches, home networks that can transmit video wirelessly into the home, and super radar that can see through rubble to earthquake victims, for instance. This technology has already been the subject of a congressional report in Washington, DC. (Eisler 1999)
- ◆ With the spread of electronic mail and electronic commerce have come “killer viruses” that can wipe out hard drives and computer systems automatically. In March, an email virus named Melissa spread throughout the USA via Microsoft’s Outlook Express email system, contaminating computer systems at many companies including Microsoft itself. (*USA Today* 3-29-99) Unlike in the past when there was one virus running around every so often, today there are eight to 10 new viruses a day and they are spreading at the speed of light. (Smart 1999) In April, computers in Asia and the Middle East were hit hard by another virus called “Chernobyl”, which did not affect too many computer systems in the USA. Turkey and South Korea each reported 350,000 computers damaged on April 26.
- ◆ Developments in Fuel Cell technology may change the way we use electricity. Fuel cells, electrochemical generators now used to run spacecraft, could revolutionize the way homeowners get their power, especially in remote areas. As unit costs come down and quality improves, electricity produced by fuel cells will be available for the same price or less than that supplied by utilities today. (Fuel 1-31-99) By placing small generators where they are used, utilities can avoid the cost of building more power lines. Fuel cells produce low to zero emissions and can be twice as efficient as standard generators. (Johansen 1999)
- ◆ Nanotechnology will lead to smaller and smaller devices. Researchers at Harvard University in the USA have succeeded in building the world’s smallest wires, less than ten nanometres in diameter or approximately 20 atoms thick, that are also superconducting. These wires are half as big as the smallest wires possible using existing microelectronic manufacturing. Small devices can be even smaller. (Nanotechnology 4-10-99) “An aspirin-sized computer that, embedded in household appliances, would allow people on the road or at the office to use the internet to cool their homes, heat coffee and tape TV shows.” (Bridin 1999)

These are a small sampling of emerging technological developments. For more thorough coverage of trends in technologies that could potentially impact the project management profession, see the PMI report on the future of project management. (PMI 1998) New technology developments, however, potentially mean new projects, new organizations, new tools and new processes for project managers. How do we keep up? What should the project management profession do about technology changes? These are strategic questions that should not be ignored.

Social Changes Have Personal Impact

Social changes often result from other factors or circumstances in society. That is true for recent changes mentioned below:

- ◆ Investing in the stock market, in other words owning shares in companies, has become a mainstream pastime in the United States. Like sports, millions of people are now interested in economics and financial markets, talking about them, betting on stocks, taking risks and earning extra money. Almost 40 percent of US households own mutual funds today. About 100 million Americans own stocks. This means almost everyone cares about business. (Deener 3-16-99)

- ◆ In Mexico, the government has ordered federal workers to shorten their lunch breaks and adapt to a more American-style work day. The change is perceived as positive by most workers, since longer lunches usually meant that employees often had to work late into the night. Shorter hours will also save the government money, an estimated \$100 million per year, just in electrical and water bills. Long lunches in Mexico are becoming the exception rather than the rule. (Eaton 1999)
- ◆ In the USA, aging populations and better health are leading to more people choosing to work later in life. The “whole definition of retirement is changing. A lot of people want to work part time or want to do something differently.” (Grimsley 1999)
- ◆ Hollywood and the Internet are changing China. “Virtually every Hollywood film has been pirated here and they are now being viewed everywhere in China. As a result, the gap between the Communist Party and the rest of China is now growing wider and wider.” Everything from American contract law to accounting standards to cultural messages is now winning here more each day. What is driving change here is the educational, commercial, entertainment and internet interactions between millions of Chinese and the outside world.” (Friedman 1999)
- ◆ Japanese students entering the workplace are worried about the economy and the future. Many are now considering work with foreign firms. The economic problems in Japan also mean that there are fewer good jobs available in many major Japanese companies. A recent survey indicated that 42.5% of Japan’s 200 major companies will hire fewer graduates this year. Last year 33% of new college graduates could not find work. In addition, female graduates may believe that foreign firms treat women more equally. (Schmit & Hadfield 1999)
- ◆ Women continue to change the world. In Kuwait, Emir Sheik Ahmed al-Jabar al Sabak announced an edict on June 17 that women will be allowed to vote and hold office in the country for the first time. This initiative is being watched closely throughout the Middle East. (Proposal 6-18-99) In Japan, women are having an economic impact not foreseen. The proportion of Japanese women buying personal computers has jumped from 8% to 25% in one year. Japanese women are “buying in” to e-commerce. “Women are not only responsible for many of the recent areas of strength in the economy, but are likely to play a major role in long-term potential growth”. There are pockets, or rather purses, of strength, including cellular phones, internet usage, PC sales, mini-car sales and condominium sales, all supported by female demand.” This all signifies the growing economic importance of women in Japan. (Abrahams 1999) In Saudi Arabia, the lives of many would-be working women have been transformed by the internet. More women are using the internet as a basis for starting or growing businesses. Unofficial statistics suggest that two-thirds of internet users in Saudi Arabia are women. (How 10-5-99)
- ◆ In the USA, the glass ceiling was shattered on July 20 when Hewlett-Packard, one of the largest and most respected technology firms in the country announced that it had selected a woman, Carleton S. Fiorina, as its new chief executive officer. Mr. Fiorina, 44, President of Lucent Technologies’ global service provider business, will become president and CEO of the world’s second-largest computer maker at the end of this year. (Maikoff 1999)

These and other social trends and issues indirectly affect most project management professionals worldwide, and directly affect projects and project participants where the change is occurring. Project managers and project management associations need to understand the social environment of their projects.

Natural Disasters, Refugees and Emergency Response

Another major set of significant events during this period was related to natural disasters and a growing global refugee problem. Hurricane Mitch devastated most of Honduras and much of Nicaragua in November of 1998, with those countries needing international assistance on a massive scale. Major earthquakes occurred in Northern India and in the Himalayas, with killer “level 5” tornadoes in Oklahoma. Major refugee problems grew around the world,

as millions of people were forced from their homes by war and politics, leading to political, economic and social instability and responses. In many cases, responses by the international community and multinational relief agencies were required. Here are some examples.

- ◆ Drought and famine in North Korea have driven thousands across the border into China in search of food. “A U.S. congressional delegation estimated last Fall that 2 million North Koreans had died from starvation or hunger-related illnesses. The river of human misery flowing into China ... “ The United States, other governments, and international relief agencies have poured in millions of tons of food, medicine, fertilizer and other aid since devastating floods and droughts in 1995, 1996 and 1997 broke North Korea’s crumbling economy and collective farming system. (Leicester 1999)
- ◆ The waves of refugees pouring out of Kosovo during the war there raised the awareness of Americans and Europeans like no other refugee story in recent years, with various aid agencies launching mass assistance programs. “International relief agencies and governments began rushing tents, blankets, food and medicine Tuesday to tens of thousands of ethnic Albanian refugees flooding out of Kosovo. About 570,000 refugees, about a quarter of the population, have been displaced.” (Food 3-21-99)
- ◆ On March 30, 1999, a 6.8 magnitude earthquake shook the Himalayas, killing 87 persons, toppling houses, setting off landslides, knocking out electricity and stranding mountain villages. According to India’s seismological department, it was the strongest earthquake this century in the Himalayan foothills. (Himalayan 3/99) “..poor villagers were living out a bitter endless wait for food and shelter Wednesday, two days after a powerful earthquake killed about 100 people in Northern India. Army helicopters dropped food to devastated towns, but many people complained that help wasn’t arriving fast enough to ease the suffering.” (Indian 4-1-99)
- ◆ On May 3, 1999, a mile-wide F5 tornado swept across Central Oklahoma in the USA with winds of more than 250 miles per hour, killing 30 people, injuring hundreds, and destroying entire neighborhoods. Other tornadoes struck Oklahoma and Kansas, destroying homes and knocking out power. (Hamilton 5-4-99)
- ◆ In July and August, floods hit several Asian countries. “A powerful storm raced along South Korea’s West coast Tuesday, dumping fresh rain on the already battered country, where at least 57 people were killed or missing in floods, landslides and rain-related accidents.” (Storm 8-4-99). “The region was struggling to clean up from several weeks of devastating floods that killed 949 people and left millions homeless. Downpours dumped 22 inches of rain on North Vietnam’s impoverished Binh Thuan province. The floods, the worst in the region in 47 years, killed 28 people there and 37 overall in Viet Nam. In China, which suffers major floods each year, 725 people have died from flooding since June.” (Residents 8-7-99)
- ◆ On August 17, a 7.8 earthquake struck Turkey just west of Istanbul, killing over 18,000 people, injuring thousands more and devastating buildings, infrastructure and industries. Rescue assistance was sent from the USA and many other countries worldwide to assist.
- ◆ On September 5, the state of Mato Grosso do Sul in Brazil announced it was considering a state of emergency with more than 2700 fires raging in open country. The state of Mato Grosso declared a state of emergency as 11,000 fires burned unchecked. The fires burned power lines to major cities in South Central Brazil. (Second 9-5-99)
- ◆ On September 16, the largest mass evacuation in U.S. history occurred as residents of Florida, Georgia and South Carolina fled inland from Hurricane Floyd. (Bell 1999) In the Bahamas, Hurricane Floyd hit hard, causing mass destruction. On the island of San Salvador, most houses were roofless, with mass structural damage throughout the country. (Bahamas 9-16-99) By September 19, Hurricane Floyd had hit the USA causing massive flooding and evacuations in North Carolina, disrupting power and industry in the Eastern USA, and damaging thousands of homes and businesses. (Floods 9-19-99)

- ◆ A powerful earthquake jolted Taiwan in the early hours of September 21, 1999, toppling buildings and killing at least 637 people, injuring thousands more. The death toll later climbed to over 2000. Major disruption in the semiconductor industry was felt worldwide. (Taiwan 9-21-99)
- ◆ On October 1, a 7.5 magnitude earthquake hit Mexico City, sending thousands into the streets of the capital. Residents of Mexico City clearly remember the 1985 earthquake that killed more than 10,000 people there. (Corchado/Easton 1999)
- ◆ Massive flooding continued in October in Southern Mexico and Central America.

What “opportunities” do these conditions and situations present to the project management profession? Do we have tools and methods that can be used for rescue or emergency projects that might help save time and lives? What about project planning models that might be implemented on short notice? If not, why not? Experts say that earthquakes will be more devastating in the future. “Urban development and unprecedented population growth will worsen the devastating affects of major earthquakes. There are 40 cities of a million or more people within 100 kilometers of a major plate boundary, and all those are good candidates for a large event. Our exposure to the hazard is increasing.” (Hotz 1999)

The global refugee problem is growing as well. The horrible plight of Kosovo’s 600,000 Albanian refugees fleeing Yugoslavia gripped the world in March and April. There were, however, 23 million refugees worldwide at the beginning of 1998, according to U.N. statistics. In Sierra Leone, near total breakdown has forced 500,000 persons to flee. Refugees from Sudan number 350,000; from Bosnia 600,000; 2.6 million from Afghanistan, 524,000 from Somalia; 486,000 from Liberia; and 515,000 from Birundi. “The US and international institutions need to re-engineer themselves for a changed world, instead of reinventing the wheel each time.” (Feeney 1999)

Should project management organizations be better prepared to offer assistance, or “expert teams” to assist on emergency projects? Should PMI, for example, establish a dialogue or cooperative relationship with the Federal Emergency Management Association (FEMA) in the USA, the International Red Cross or other relief agencies?

Global Model Revisited

The Three Dimensional Strategic Model

In 1998 I suggested a three-dimensional model for use by project management associations that included the following elements:

- A Structural Dimension
- A Policy Dimension
- A Strategic Dimension

I believe this model can still provide a useful approach to establishing a strategic decision-making process for professional organizations. Discussion of these three elements is again presented below.

Multi-dimensional Structural Relationships

An organizational model is needed to show the relationships of PM associations (or the PM profession) to various governmental, industrial and social organizations. Since various types, sizes and levels of organizations exist within each of these categories, this model must also be multi-level and multi-dimensional, in order to represent relations between and among various local, regional, national and international organizations and agencies. This model should be used to identify relationships and communications needed between and among leaders of those organizations. At a minimal level, each PM association should establish a model to help understand its relationships with other local organizations (i.e. in order to know who to talk to, etc.)

Responsive Policy Decisions

Clearly, a “one policy fits all” approach cannot work in a global environment. On both a local and global basis, the project management profession needs a policy model to provide a basis for responding to changing economic, political or social situations or opportunities. I see this as the key element of the new model. Basically a decision-making model for professional leaders, this model might affect products and services, pricing, timing and location of conferences, and other issues. For example, perhaps PMI should mobilize an “emergency technology team” to assist in the event of natural disasters. Or perhaps discounted memberships should be offered to potential members in certain organizations or economic situations. I suggest a quarterly review of a matrix of global events/changes/trends with associated potential impacts and appropriate policy issues as a basis for responding with appropriate policy decisions.

Pro-active Strategic Planning

A model is needed for incorporating the long term effects or impacts of significant global events and trends into the strategic planning process of the organization. Long range objectives should be established for various organizational, technological, environmental, economic, political and strategic issues. For example, the future relationship of the organization (or PM profession) to educational and social institutions, including academic, health care, community and religious organizations should be considered in any long range model or planning process. Relations with governmental and industrial organizations, both on a local and global basis including the military-industrial complex, should also be addressed. Technological changes in particular should be considered in long range planning for project management organizations, as the tools and methodologies associated with project management continue to evolve and expand. I suggest a strategic planning model with categories of long range objectives, issues and strategies, that can be re-evaluated each year in lieu of significant events or changing trends.

Recommendations for the Project Management Profession

In order to implement an effective process of responding to global events and trends, I offer the following four simple suggestions for PMI and other professional associations.

Organizational Attitude Adjustment

First, the project management profession should begin to appreciate the greater importance of external events and issues to the success of projects, project management, the project management profession and individual professional organizations. Current events and trends should make those points much more obvious. The project management profession is still young, with many influential organizations and stakeholders not yet participating. Unless we bring these external stakeholder groups and issues into the equation, we run the risk of advancing a profession that most of the world does not use or care about.

Secondly, we should recognize that “one size fits all” is not an appropriate strategy for globalization. More flexibility, in structure, policies, products, services, pricing and implementation is often needed. This is certainly true when responding to rapidly changing circumstances, environments or trends, whether they be related to geopolitical events or technology changes. However, events of the last few years have clearly demonstrated that the world is not yet and is unlikely to ever be subject to a single economic, political or social model. Therefore, our models and strategies must be just as varied, in order to respond to the needs and demands of the marketplace.

Research and Analysis

PMI’s Future of Project Management research initiative is a major step in the right direction. However, more research is needed with respect to the relationships of the project management profession to external organizations, events, trends and conditions. Several specific topics for possible research projects were suggested last year. (Pells

1998). Now I suggest research topics associated with each of the categories of external events and activities addressed in this paper. In addition, these issues should be explored with respect to individual countries, regions, industries, organizations and projects. The same decision-making model suggested above can provide a subject list for research and analysis.

Practical Decision-Making Models

PMI and other project management associations should develop some simple and practical decision-making models that address the structural, policy and strategic issues identified in this paper. Initially, those models can include organizational diagrams; spreadsheets of issues, possible impacts and decision options; and a strategic planning template with long range trends, issues, objectives and strategies grouped by categories. The issues introduced or discussed in this paper are broad, with potentially far-reaching impacts. However, they are issues that should be addressed by any organization involved in globalization, and certainly by the global project management profession, in some organized manner.

Localization of the Process

The best way to actually implement the suggestions in this paper is to begin at a local level, for instance for a PMI chapter or a national project management association. A local organizational model can be developed to show the relationship of the local project management association to government agencies and industrial firms, which can then be used for communication, relationship building, marketing and developing products and services for local stakeholders. A policy model can be developed for local decision making to respond to economic, political, industrial or social conditions, events or changes. Each local organization can develop a longer range strategic plan that includes long range objectives, and which provides for updating objectives and strategies based on changing economic, political, social or technological trends. Regional and global organizations can use the same process, but the issues, organizations and requirements will be broader and more difficult to define. I suggest, for example, that PMI South Africa consider implementing this model to provide a strategic planning and decision-making framework for the next five years.

Conclusion: Globalization in a Rapidly Changing World

This paper has been another attempt to provide some perspective on recent significant events around the world, associated with military actions, politics, economics, technology and society. Globalization of the project management profession will require that professional associations understand global trends, the impact of significant global events, and changing conditions in various geographic areas, countries, and industries. Individual project management organizations should understand their local external environments, with respect to major stakeholders, economic and political conditions, and events that change those conditions. Technology can provide a more level “playing field” for everyone, dramatic “competitive” advantages or disadvantages, or untold dangers.

The addition of social changes, natural disasters and emergency response needs suggests that the project management profession should also become more responsible and responsive related to social needs. In all regions of the world, project management expertise can be extremely useful for leading and implementing improvements, even saving lives. Global conditions continue to change rapidly. As the world becomes more closely tied together by technologies, markets, trade and communication, the global impact of significant events can be rapid and widespread. This paper was another attempt to demonstrate that fact, and to again suggest that professional leaders establish decision-making models that allow them to respond more rapidly and responsibly to changing global conditions.

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