

## ABSTRACT

### The Rise of International Project Management as a National and Corporate Strategic Advantage: The Impact of Outsourcing Technology and Business Process Projects in the New Millennium

To a nation watching high technology jobs and competitive opportunity heading beyond the horizon away from its shores, the impact of outsourcing is great. This critical situation is being faced by today's political leaders in Washington D.C., Europe, and in the heartland of America. Across the industrialized world, losses are felt by those who were traditionally assured job security these past four decades. Professionals and "white collar" workers have looked to higher education to acquire emerging skills in software development, business process improvement and business process re-engineering. Today, outsourcing is moving these highly skilled jobs overseas. However, the jobs unlikely to move are those of keen analysts and adroit project managers with global leadership skills. Special issues related to managing outsourced projects are:

- Where are the outsourcers?
- Virtual Teams and collaborative software.
- Web services and information security.
- Resource management and productivity.
- Managing change and long-distance implementation.

#### **The Situation in 2004**

Outsourcing is viewed from many different aspects with differing attitudes and strong opinions, whether viewed locally, nationally, or globally.

- Local: Effects on unemployment rates and the corollary effects to local economies
- National: Impacts to National pride
- International: Balance of Payments and shifts in sovereign purchasing power

Still, other emotional responses to outsourcing include smaller economies alleging that big corporations are "taking advantage" of third world countries; human rights inequities are being propagated. Does the rapid and extreme influx of cash to an impoverished nation through outsourcing proliferate the inequities of the social classes in an artificial manner, where children far outstrip their parents earning capacity in a single generation?

Other challenges arise, to be addressed. How does a domestic firm manage geographically dispersed projects and programs. Questions arise of how to maintain the quality benchmark of these projects, while still making them cost-effective.

Outsourcing can be done in whole or in part. It may be done without going offshore, using local, regional, or across country suppliers. However, the focus of this paper

concerns the special considerations and impacts of international projects. Special issues related to Project Management operate in these circumstances:

- Virtual Teams and how they should be constructed
- Managing resources and productivity
- Monitoring progress and managing changes

Accordingly, outsourcing is also defined in many differing and even opposing ways. In government venues, the United States Office of Management Budget (OMB) defines outsourcing for federal procurement purposes. OMB provides and "an analytical framework on which the government bases a decision on who can best provide the products and services it needs." A commercial activity that may be outsourced is one that is a result of a requirement, or need, that the federal government has for a product or service, for which the product or service may be obtained from a private sector source.

Outsourcing is also defined in various industry venues simply as work done for a company by people other than the company's full-time employees. Outsourcing is an agreement concluded between a business and a third party for the ongoing management and the improvement of activities related to a part or to the whole of:

- business functions (e.g. human resources, marketing, payroll, billing, tax returns)
- operating processes (e.g. procurement of raw materials, industrial production, operation of a telecommunications network)
- an infrastructure (e.g. information systems, security systems, telecommunications networks)

### **Why is Outsourcing Technology or Business Processes so *Attractive*?**

Some of the reasons found that make outsourcing a compelling business arrangement include cheaper labor, higher education levels, cultural attitudes toward quality and work ethic, worker productivity, maturing infrastructure, telecommunications availability and lower costs for these, availability of local labor speaking English:

- Cheaper labor resources exist abroad due to lower standards of living, lower education levels, and fewer social welfare programs. This results in an opportunity for local, private companies to establish training programs to develop a specifically trained labor force for specific "body shop" work. In this scenario, specialized labor may be then made available for "niche" outsourcing contracts with larger companies abroad who do not wish to diversify and dilute their core business focus.
- Overseas education levels in certain under-developed countries are high due to government focus on educating their population in areas like technology. Because of government investment in this re-training of their labor force, higher education comes at a fraction of the cost of U.S. graduates and employees.
- Cultural attitudes toward quality and "work ethic" in many Asian and Eurasian nations often translate to a population that believes in personal sacrifice for the good

of the homeland. Dedication to state-fostered education programs as well as to state-run entities may mean higher worker productivity levels.

- Maturation of infrastructure for telecommunications, energy, etc. in many under-developed countries, as international agencies like the International Monetary Fund, the World Bank Group, and governments themselves have invested to stabilize their infrastructure and develop higher bandwidth telecommunications capabilities. These technological advances come at a lower cost today than many of the U.S. companies that invested in technology early, such as fiber optic cabling, when the costs were still relatively high. Nowadays, some countries are investing in shared satellite communications and other mechanisms for global communications capability.
- The internationalization of “English” and the ability of many countries to “telecommute” removes traditional barriers to job opportunity. Local labor can now provide services, as quasi-employees or representatives to larger firms for higher paying salaries, without having to deal with immigration laws, or having to wholesale, move families and uproot themselves to better their means.

### **Project Management vs. Old-Line Management**

Where an organization actually looks inward for the procurement of goods or services, a new term has been coined for these situations called “Insourcing”. In all of these cases, however, sound management discipline suggests that certain principles of *project management* apply even more directly.

An outsourced piece of a company’s business operation qualifies as a project, and as such requires special discipline and practices when implementing the outsourced work. Consider the following table comparing traditional management to project management.

<b>Project Management</b>	<b>Line Management</b>
<ul style="list-style-type: none"><li>■ Finite timeline and resources</li><li>■ Specific technical constraints</li><li>■ Crosses functional boundaries</li><li>■ Relies heavily on influence and persuasion</li><li>■ Draws together different skills, resources and outlooks</li><li>■ Creates change in the organization</li></ul>	<ul style="list-style-type: none"><li>■ Continues indefinitely</li><li>■ Tends to be hierarchical</li><li>■ Based on formal authority</li><li>■ People tend to have common skills and attitudes</li><li>■ Maintains the organization</li><li>■ Budgets and operations are continuous over time</li></ul>

Traditional management assumes that the manager may walk the halls and view the business processes on a daily basis. The manager thus gains a familiarity and awareness of what is going on. In an outsourced business, the manager is generally only in contact

with the outsourcer via non-visual communications channels, such as telephone, written reports, email, or perhaps through the use of technology.

We differentiate projects with the following definition: **A temporary, but vitally important endeavor undertaken to accomplish a unique purpose, often using skills from across functional boundaries.** Outsourced work is often characterized by several work packages. Each work package, or segment of discernable work with specific requirements for performance, has a team leader or outsource manager. Thus many larger outsourced jobs are construed by multiple project leaders. Between the company and its outsourcer, there are likely to be potentially conflicting interests or proprietary perspectives. This can lead to not only geographical differences, but even protectionist attitudes as to turf area and span of control.

In some cases, the management of outsourced work is made even more complex by the introduction of numerous sub-contractor relationships. In this case, the complexity of managing the outcomes and ensuring that they meet quality, time, and cost objectives means tracking and monitoring multiple financial arrangements and contracts. Contracts may exist for suppliers of support services located in other geographic locations (such as staff manning a telephone response help desk, an application service provider hosting web-based software applications, etc.).

Complex reporting relationships may exist with additional labor being provided by subcontractors doing core work for the organization (software development for in-house use, etc.). Finally, individual contributors such as consultants performing services for your clients (such as bill processing, medical records data entry, trouble-shooting or handling customer returns or order cancellations, etc.) may directly impact the future success or viability of the company's core business operations, through their direct line access to the customer. In such cases, careful monitoring to ensure that these outsourcer third party providers fully understand the image they are projecting as representatives of the company they are supporting.

Many citizens decry that these "foreign" workers cannot possibly offer the same level of understanding of customer needs. In some case these observations have held true. Some companies have had to learn the hard way, that they might have to bring back in the work that was let to outsourcers for the bad experiences their own customers or employees have had.

### **The Situation in 2004**

Recent furor over job losses and industrial nations' fears that jobs are migrating away from their shores, are causing a backlash of fear-based uncertainty as to how to handle this globalization of jobs. Recent comments quoted in the press have added fuel to the outcries for government action. Industry takes an opposing view, regarding outsourcing as merely another form of commoditization and Adam Smith economics, where the best "deal" results in the business achievement. This past Spring 2004 saw uncontrolled

political wrangling over the U.S. President's Economic Advisor comments concerning outsourcing as just another commoditization of resource:

Chairman of the Council of Economic Advisers Dr. Gregory Mankiw said in his letter that economic changes "can cause painful dislocations for some workers and their families," but he said the goal of economic policy should be "not to deny change but to help workers prepare for the global economy of the future."

Democrat Tom Daschle, Minority Leader was quoted by the Washington Post: "I think they owe an apology to every worker in America."

Industry leader Carly Fiorina, CEO of Hewlett-Packard Corp. was quoted reporting to a Congressional Commission: "There is no job that is America's God-given right."

Individuals worry about what jobs will remain for their progeny. Students worry where they will have to move to and what should they study to be employable when they enter the job market three, four, or six years from now.

### **"Voodoo Economics" and a Public Hysteria Not Supported by the Numbers**

As U.S. President's Bush lead economist stated, "We are used to goods being produced in one country and transported to another on ships and planes. We are less used to services being produced in one country and sent abroad on fiber optic cable." The Washington Post went on to retort in its February 2004 editorial:

Mr. Mankiw's offense was to say that the normal rules of trade apply to services as well as manufacturing. Just as it makes sense to buy cell phones from Finland if they are cheap and excellent, it makes sense to buy call-center services or software programming from India if these are the best on the market. Not only is Mr. Mankiw right, but to argue otherwise is elitist and offensive. It would suggest that it's okay for blue-collar workers to lose jobs to foreign competition but not okay for white-collar folk to face the same competitive pressure. . . . But the U.S. economy will not run out of jobs as a result of some service activities being tradable. After all, technology has been eliminating back-office administrative jobs for a decade, yet unemployment sank to record lows during the 1990s. Why believe that the next phase of U.S. cost cutting will produce a different outcome? And is there nothing to be welcomed about workers in poor countries getting decent jobs? [WASHINGTON POST 2004]

U.S. Senator Santorum of Pennsylvania said Bush's jobs plan and tax proposals would address the problem. "I was with the president today, and I think he made the point very, very strongly that the key for this administration is creating jobs in this country and training workers so that [outsourcing jobs] doesn't have to happen," he said. Furthermore, the new proposal "requires companies that send jobs overseas to provide notice to [their] employees and the Department of Labor... to disclose how many jobs are being shipped overseas, where they're going and why. This would provide valuable information for policy makers and, hopefully, encourage employers to think twice before they move jobs out of America." [Washington Post 2004]

Yet, the questions persist among public opinion. How to stop the flood of jobs leaving the U.S.? How will the unemployed and a nation share in the savings that a corporation gains from outsourcing its jobs? Are the countries that are receiving these job opportunities using their increased spending power in humanitarian and egalitarian ways? What is the impact to local host country economies to sudden inflows of dollars as a result of increased local incomes of their citizens? What about the loss of U.S. purchasing power when corporations are sending U.S. dollars overseas to pay for cheaper labor?

### **A Global World – Democracy or Communist Manifesto?**

However, looking to the history and founding principles of democracy upon which the United States of America was begun, it is exactly a flattening of the social equalities that was the driving objective for the Declaration of Independence. In fact, wasn't Karl Marx's Communist Manifesto also positing equality of humanity's receipts. With the Cold War evaporated, the larger nations have been firmly supplanted in the age of information advantage. Nations that can offer skilled labor and knowledge to other countries' private industry now have the technological wherewithal to compete in a global marketplace.

An article published over ten years ago in IEEE Software, recommended to developing nations in South America to invest in stabilizing their infrastructure to support attraction of foreign ventures wishing to utilize trained, but cheaper labor resources for projects. [Press, 1993] Press mentions technology as a key ingredient to any developing nation striving to compete in a global marketplace where local labor is marketed as a viable commodity.

A millennium change later, we have witnessed a minor, but growing shift in the provision of labor resources for technology and business process projects, previously only awarded to textile, clothing, and other sort of manual labor "sweatshops". In fact, the newly wealthy generation of young technologists are bringing to bear their government-subsidized technical education, their acumen with the English language from having been once colonized and schooled in that language, and are finding themselves far better off financially than their forefathers could ever have imagined or hoped for.

### **A Browse, An Inquiry, and A Buy – the endless Mall of the World**

We all thought that the dot-com craze was an economic disaster. But, in fact, the rapid rise of profit seekers and venture capitalists hoping to tap into international marketplaces, without buying an airline ticket and wearing out the leather soles on their feet, found they could establish a store on the internet highway, and everyone who passed in cyberspace, might stop for a browse, an inquiry and a buy. However, the costs of establishing and then competing on price soon caused the "dot-com" bubble to burst for many entrepreneurs.

Many people lost their web designer and developer jobs when it was discovered that online stores are still burdened with shipping costs, all the headaches of logistics and customer service, poor supplier throughput and stiff, rapid competition. They could not, in general, sustain the costs of inventories and staffing when shoppers abandoned their store and went elsewhere for the buy. Larger institutions such as eBay and Amazon had to find ways to charge for listing and selling items, for belonging to their web-site or through partner relationships, for a “fee”.

Is it in the purview of U.S. economic policy or human rights watchdog role to ascertain theta the local labor being used to create products that will be sold in the U.S. and across the world by U.S. parent companies, is legal and fair? What about Kathy Lee Crosby’s clothing manufacturer who used, unwittingly of course, child labor to produce products that were sold in Kmart and other U.S. stores to U.S. consumers? The U.S. took strong action to bring this situation to light and to use both the public opinion forum as well as the courts to put an immediate stop to the human rights abuses. We can’t fight against the tide for which we have long dreamed – that of globalization of the marketplace, of equal opportunity and the right to pursue health, happiness

### **Right to Work and Productivity Effects**

Did not the Declaration of Independence state: “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness -- That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it.” Clearly, our goal as a nation is to promote and support the equality and freedom of humankind to fully pursue and realize their dreams even across oceans and political borders.

When we see offshore outsourcing, instead of railing against the loss of jobs, we should be examining of the replaced jobs are in fact judicious and fair to the new employees and not in violation of our national principles, so stated in our Declaration of Independence.

However, where does this leave a nation of families, children, and formerly well-employed “white collar workers” and professionals? Clearly, there is more realistic evidence that outsourced projects are, in fact, not decimating U.S. offices or white collar jobs; the actual numbers of displaced American workers number in the 250,000 range. This is not an epidemic in a nation with a 250 million populace. In a nation experiencing increasing productivity levels, the economy will not run out of jobs. Rather, there will continue to be a shift in how some service activities are performed in the U.S., as well as in how they will be done abroad by non-U.S. workers.

Since the 1940s, advances in industrial equipment and factories caused shifts from manual labor to skilled and automated labor. Technology has largely eliminated back-office administrative jobs since the 1970s. Unemployment is not a staggering number when compared to other nations across the globe. Industrialized nationjs are

experiencing a shift in labor concentration. In the final analysis, it ought to be rather viewed as inviting for workers in poor countries getting decent jobs.

### **Federal Intervention or Corporate Self-Governance?**

Many are calling for federal legislation to restrict or inhibit the future business of companies that are considering or who have shipped work overseas to offshore development organizations. In fact, this policy would not be workable, as it is unlikely that any organization will rip out its Cisco routers and replace them wholesale with equipment produced by lower-cost manufacturers. Organizations will not shift from use of their Oracle databases and data warehouses to some other RDBMS because the development there is cheaper. However, by capitalizing on the natural and manifest destiny of the American dream, we in the information technology (IT) field should be training our sights on the horizon of what could be.

First off, let us examine the obvious evidence that our professional business skills and training have developed a workforce of thinkers, analysts and creative business process change and re-engineering leaders. We can take hold of and capitalize on the opportunities to construct ever more imaginative technologies and utilizations to enhance our way of life.

As portrayed in Hollywood movies, we foresee a future where technology enables us to work from home, from the vacation spot, or from the fishing hole. Isn't this what the American dream was all about? The American Dream was all about time for family, enjoyment of life and liberty, and the freedom to pursue that which makes us happy. By re-training out-dated programming or business process professionals in the newer, more modern, and in demand skills of business analysis, communications, and project management technologies and techniques, we will retain the most interesting of the professional jobs. The illustration below depicts one view of the expected salaries and anticipated outsourcing likelihood of certain technical and engineering careers.

<b>Technology Jobs</b>	<b>Pay</b>	<b>Outlook</b>
Architects	\$150,000-\$250,000	Use the "Experts"
Researchers	\$50,000-\$195,000	Offshore possible
Consultants	\$72,000-\$200,000	Bright for American
Project Managers	\$96,000-\$130,000	Management Skills
Business Analysts	\$52,000-\$90,000	Industry Knowledge
Basic Programmers	\$52,000-\$81,000	Technical skills
Customer Service	\$12,000-\$40,000	Language skills

Source: Forrester Research, Foote Partners, Kennedy Information Inc.

It is not conceivable that foreign workers would be flown to the U.S to conduct user interviews nor conduct user requirements sessions. It is more likely that a U.S. located professional who understands the nuances of American business processes will be developing the requirements documents, software models and object use cases. While testing to specified requirements can be done with offshore resources, user acceptance testing, on-site implementation and training of the user workforce will, of necessity, stay in America.

Likewise, the most successful uses of outsourcing have been done with project managers that shuttle between the outsourcer location and the corporate locations to ensure ongoing assurance of quality. These professionals must demonstrate a keen understanding of domestic business operations, and be able to communicate the detailed and accurate specifications to the outsourcer. These are the jobs that cannot be outsourced offshore to non-domestic workers. These project managers and architects of the client needs will be the higher paid individuals and with adequate and advanced training in business and technology their jobs will be secure for a long time to come, as we compete in the global marketplace for the best-fit solutions to the problems and circumstances of tomorrow.

### **Offshore Projects Require Leveraged Technology and Higher Education**

The success of offshore projects require enhanced understanding of the technologies that enable projects to come in on budget, on time, while meeting the current user business requirements. An adroit project manager has the skills of American corporate politics, and communication in their bag of qualifications. Statistics involving IT projects in the 1990s gave many IT projects a bad report. A 1995 Standish group study found that only 16 % of IT projects were successful. Nearly a third were cancelled before completion. Yet, in 1998, corporate America initiated 200,000 new IT projects; in 2000, 300,000 new IT projects were initiated; and by 2001, over 500,000 new IT projects were started. This growth in the demand for IT projects and the corresponding expansion of available, cheaper technology makes outsourcing workable today.

- Telecommunications costs dropped by factor of 30 from late 1980s to 1990s
- Lesser developed countries invest in technology education for labor forces

Through the use of collaborative and virtual team software, and through secured use of the internet for cross-border communications, the U.S. project manager brings a set of skills unmatched in other parts of the world. This is where public focus and politicians need to look for retraining. Universities and colleges, like Pittsburgh's Carnegie-Mellon University's Service Management program and Duquesne University's John Donohue School of Graduate Studies in Information Systems Management serve these needs today.

Teaching unemployed, but intelligent professional workers and upcoming students the skills and tools required to manage offshore projects and how to integrate use of technologies for virtual teaming relationships is the assurance of maintaining America's leading role in globalization of technology. Professors coming from private industry where web-based collaborative work environments, like the former management

consulting giant, PricewaterhouseCoopers' system of LotusNotes knowledge bases, share experiences and lessons for how to effectively manage geographically dispersed development efforts across the world.

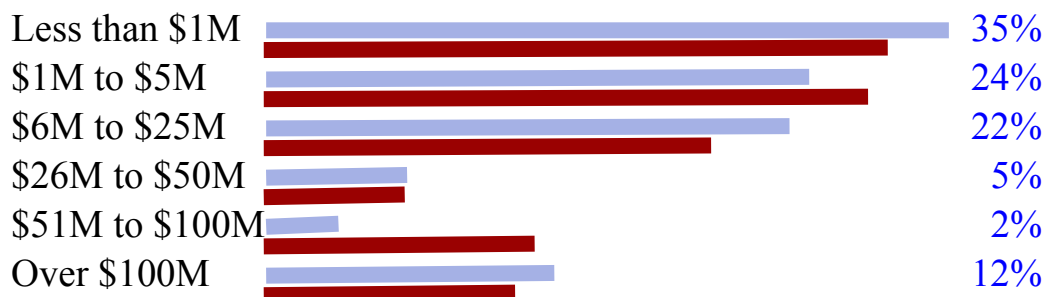
## Outsourcing – Where it Is and Where it is Going

In studying what sort of work is being outsourced, we find two major approaches to outsourcing from the U.S.: technology and business process operations.

- Best Technology Outsourcing Options:
  - Ongoing software maintenance for existing systems
  - Software Conversion Projects (e.g. modernizing from old systems to newer software languages) – such as was done with old COBOL programs during the preparations for the Year 2000 (Y2K) millennium change
  - Original Application Development based on user requirements specifications
- Best Business Process Outsourcing Areas:
  - Rebate processing for manufacturer mail-in rebate coupons
  - Medical records transcription; physician dictation processing
  - Insurance claims handling and payment authorization
  - Credit card transaction processing and billing/collections

The Outsourcing Institute collects data on projects from participating companies. Recent data collected indicate that over 35% of outsourced projects were under \$1 million in 2001. Their forecasts however, at that time, indicated that by next year, 2005, projects over \$100 million in individual size would have grown from 12% to over 19%, thereby increasing dramatically, the importance of skills in managing international outsourcing projects.

In 2001, >80% invested less than \$25 million in typical contracts.



By 2005, 19% plan to invest more than \$50 million in a typical contract.

Source: The Outsourcing Institute, IT Index, 2001

## **A Special Kind of Project: The Good, the Bad, and the Ugly**

In studying the lessons learned from companies that have outsourced projects, certain universal considerations emerge. Some of these relate to the importance of good communications channels, others relate to the mix of outsourced labor to project management personnel and where they should be located, to legal considerations when drawing up and then executing an outsourcing contract. This section addresses some of these lessons.

- Consideration for outsourcing should be to reduce operating costs, but do not outsource the control functions for the project.
- Capitalize on the outsourcing provider's newer hardware and software technologies.
- Provide mechanisms for geographically disbursed teams to maintain the focus on corporate objectives and goals, clear direction, and frequent checkpoints.
- Use a centralized project management information system (PMIS): this helps provide a visual "big picture" view of the context of the outsourced project within the overall client organization.
- A web-based PMIS supports online status reporting and project by project accountability. Developed Balanced Scorecards tied to measures of success support the project manager's "finger on the pulse" of all vital signs.
- It is critical to establish a "culture" and set of "norms" that are synchronized across the client organization and their outsourcing partner.
- Use Project Management techniques and documentation to monitor and control, execute appropriate corrections as needed.

Some real-world examples reported in a recent article in Computerworld lend credence to some of these lessons. In one "good" case, Patni, Inc. uses a three-tiered project approach to execute outsourced projects for net cost savings. They cite their outsourcing projects as being characterized by 7000 employees in India, another 1500 project managers that shuttle between India and U.S., and the 150 U.S. industry experts based in U.S. This approach ensures that the outsourced projects are managed with domestic, business knowledgeable staff, and continually supported by subject experts who maintain the open lines of communications by being housed where the core business functions are initiated.

In a lesson gone "bad", Logitech took an initiative to outsource 80% of the production of its "mouse" hardware and design. However, in the first year, Logitech found that market design changes were evolving so rapidly that the outsourcer was unable, either contractually or knowledge-wise to help Logitech maintain its innovative edge. Competitors were able to test and implement changes to design, function, or price more rapidly because they controlled production lines.

Similarly, the public outcries over loss of jobs has had a backlash against the outsourcers themselves. The "ugly" side of this sort of negative publicity for outsourcing done well

has been that “some Indian software companies that once publicized their new U.S. customers no longer do so, for fear of adverse publicity.” [Johnson 2004]

### **Rational Projects and How to Make Outsourcing Work with PM**

Considering the hard lessons given as examples in the previous section, why are companies eying outsourcing as a necessary consideration for financial survival, if it is so difficult to execute and coordinate? State Street Financial recognized that their investment clients across the globe also required them to be able to provide 24 hour service, seven days a week (24/7). This could not be accomplished with a domestic work-force without incurring huge overtime expense and shift work. State Street found by placing outsourced teams, supported by IT staff in various time zones, they could comfortably provide 24/7 service to their customers through the use of selected outsourcing partnerships. On the other hand, Nielsen Media Research which collects, collates, and analyzes television viewer data found the coordination efforts of data collection and analysis using offshore assets was too cumbersome for them. In order to effectively manage the critical paths of their projects, they needed to bring the work back to domestic shores for adequate control to ensue. Clearly the cost of collaboration and the role of monitoring and coordination are key functions in outsourcing projects.

Outsourcing teams and their clients, therefore, require an added infrastructure to facilitate reporting and coordination. Today’s technology provides web-based tools that include ready made templates for virtual teams to coordinate project(s) across time zones and sovereign borders. Centralizing documentation and providing a balanced scorecard for weekly status reporting and monitoring goes a long way to replacing the project manager on-site.

Companies considering the use of such on-line collaboration tools need to study the costs and benefits of a particular suite of tools. Ease of set-up and low tech maintenance is vital. It is important for the outsourcing team to be an active player, and training to ensure broad entrenchment and understanding of the virtual team collaboration site is critical to success. In some cases, the online virtual team tool can also be used as an electronic meeting venue, complete with video conferencing, as well as electronic white-board capabilities. Certain security management considerations are also worthwhile addressing as the firm establishes the web-site for internet or intranet access, to team members alone. The following table includes some of the relevant security guidance from the ISO 17799 standard for Information Security Management.

### **ISO 17799: Information Security Management**

- Security policies and management procedures in place
- Maintain accurate inventory of IT assets
- Workers and business partners are qualified to fulfill duties and responsibilities
- Data centers are physically protected against access by unauthorized parties
- Comprehensive business continuity plans have been developed and *tested*

Lastly, as a company considers outsourcing, there are the legal and contractual aspects that must be considered as well. First, the client firm should ensure that the outsourcer is financially sound, by independent audit and verification of financial assets, as well as contract obligations of the outsourcer for equipment, infrastructure, and space location. Second, include contract provisions to ensure timely notification of any developments, whether internal or externally generated, that could conceivably impact the ability of the outsource supplier to perform or complete the contract provisions.

Ensure that verbal communications and the ability of both parties to the contract to make easy modifications for changed circumstances or revised requirements exists in the contract. Service level agreement provisions should include periodic formal reviews, in addition to informal reviews, and the allowance for “spot checks”. The possibility of amendments should be provided for in the contract language, so that the terms can be flexible enough for changes, but not flexible as to how they may be interpreted. Wherever possible, metrics should be required to ensure statistical collection on processes or contract performance items to avoid misunderstandings.

Lastly, in the event of a change in ownership or the untimely departure of certain key personnel, the company should ensure that they have the right to terminate the contract, or to re-evaluate the contract terms, such as pricing, duration, location of services, etc.

### **Ethics and Cultural Differences in Outsourcing**

No discussion of the pros and cons of outsourcing can be complete without addressing the concerns of globalization and its impact on human conditions, in both the outsourcing location, as well as in the country of the firm moving those jobs away. This paper has addressed many of the cultural aspects as well as infrastructure requirements for outsourcing. Domestic staff required to travel to remote, outsource supplier locations are likely to experience culture shock as well. However, research has shown that this eventually settles down after an initial honeymoon phase, followed by a sense of

abandonment and disillusionment with the cultural differences of the host country. The émigré adjusts and settles in, in fact, drawing the outsourced project closer to their personal sense of responsibility. Contact with industry experts, as it Patni's three tier model, helps to alleviate much of the abandonment sensation.

The firm, as well, needs to consider the viability of any particular host country as to its political stability, the state of its infrastructure and local services, such as water, transportation, and availability of trained, skilled labor. Political stability can affect supplies and the availability of human resources if conflicts ensue.

- Carefully define the Project – what skills may be outsourced
- Document Processes and the Project Oversight Schedule
- Compare quality and cost (workers' availability) of different Outsource Suppliers
- Plan every step of the Project through Deployment and Post-Deployment
- Maturity of existing infrastructure: communications, electricity, water, heating, crime, housing, etc.
- Evaluate obstacles (availability and location of technology, airports, shipping ports)
- Evaluate local politics, safety and hazards of local conditions
- Education, language, and local culture may limit skilled expertise
- Legal and human rights considerations
- Determine applicable local policies and laws and regulatory environment
- Define, procure, install coordination infrastructure (databases, connectivity, networks, equipment)
- Outsourcing requires close management, clear requirements, communication across cultural and language barriers

In conclusion, domestic firms must consider the ethics as well as the financial wisdom of such a venture. The commitment means that there will be a loss of high tech jobs domestically. Public awareness spurred by either a federally mandated or locally published "reporting requirement" can have negative consequences. Host countries that tax excessively or permit excessive work hours, or un-democratic, inhumane working conditions can impact both the client firm as well as the local populace of the outsourcer. Security breaches as to privacy of client data being given over to non-domestic, international outsource suppliers can be extremely expensive for firms that experience such thefts of data. Overall, however, the globalization of labor as a commodity has been coming, just as technology has sought to reduce the amount of manual, non-creative labor that mankind has to contend with. Was this not our goal as a nation? Freedom for the pursuit of happiness, and for all humans to be afforded the means and the time to realize their dreams even across oceans and political borders.

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