ISRC Notes—April 2003
"Global Sourcing of Information Systems"
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*Seeking lower costs and higher quality, American companies are turning to other countries for their software development needs. Countries such as India, China , Singapore, Mexico, and Russia are just a few of the countries that are welcoming the U.S. software development needs with open arms. In April, ISRC welcomed Jim Crompton of ChevronTexaco, Laura Tibodeau of Hewlett-Packard, Ravi Pandit of KPIT Cummings Infosystems, and Ritu Agarwal from the University of Maryland to discuss this very timely topic.*

**The Global Outsourcing Phenomenon**

American companies are finding that sending IT work offshore can cut project costs by as much as 70%...a compelling savings in a cost-conscious economy. According to Forrester Research, nearly half of all CIOs use offshore providers today, and two-thirds plan to send work overseas next year. India has established itself as the dominant country for outsourcing. Giga Information Group predicts that outsourcing to India will grow by 25% in 2003 because of the "incomparable quality and cost benefits" offered by the country. A recent Gartner survey found that 70% of business with more that $1 million earmarked for offshore outsourcing will turn to India. For instance, Bank of America has said it will outsource up to 1,100 jobs to Indian service providers this year. In addition to India, countries to watch include Canada, China, Mexico, the Philippines, Russia and Singapore.

There's much to gain from this global outsourcing, but given that a quarter of offshore projects fail to meet expectations, there's just as much to loose. The keys to success are picking the right place, partner, and project. To help find the right place, CIO Magazine published *A Buyer's Guide to Offshore Outsourcing* (www.cio.com/offshoremap), in their November 2002 issue, which takes a look at 26 countries that are the strongest outsourcing contenders, focusing on costs, English communication capabilities, and overall risk.

AMR Research found that one-fifth of Global 1,000 companies are outsourcing offshore, even as issues of political unrest and data security remain high. They also report a 22% growth in the offshore outsourcing industry in 2002. They attribute the growth to a decrease in overseas labor costs. Where three years ago, offshore programmers were making $30-$50 per hour, their rates have fallen to $18-$20 per hour. This has helped to being offshore outsourcing into the mainstream.

**Evaluating the Global Outsourcing Opportunity: Jim Crompton, ChevronTexaco**

ChevronTexaco has leveraged global capabilities for Application Development and Maintenance (ADM). ChevronTexaco was committed to utilizing the best internal and external global sourcing solutions regardless of source. However, they felt it was important to first ask the question: "are we only looking to reduce costs by leveraging global resources for selected applications (our current assumption) or are we consciously establishing the framework for a strategic direction?"

**Concerns with our current assumption:**

- **sub-optimization**
  - **better deals the more people participate**
  - **full benefit from the sourcing relationship may not be achieved**
- **losing a competency without understanding the impact**
- **sourcing decision is revisited**
- **could work counter to future strategies**

**What will we look like in the future?**

**What strategy are we asking people to align with going forward?**

**What prevents us from going back to our current state?**

**Will we make a sustainable change in the organization?**

When deciding to use a global provider, Crompton (use last names for all) said ChevronTexaco looks at four key value measures: savings, quality, risk mitigation/avoidance, and stability/flexibility.

**Savings** - Most important value is overall savings opportunity. Without this, we would not look at alternative delivery models. Cost-avoidance is not an acceptable result. This includes consideration for 2003 after-tax earnings.

**Quality** - Solution fit with business requirements for support, process, and work-product quality.

**Risk Mitigation/Avoidance** - All else being equal, the lowest risk alternative will be preferred. There is some level of risk that's unacceptable at any NPV.

**Scalability/Flexibility** - Alternative(s) should be able to handle unanticipated demand variation and a wide variety of current and emerging technical platforms.

They then perform a Gap Assessment to decide (1) Where are we now? (2) Where do we want to be? and (3) How do we get there?

From there they evaluate the organizations strengths and weaknesses and then look at the opportunities and threats that global outsourcing can present.

| **Opportunities** | **Threats** |
|---|---|
| -Significant cost savings can be realized through the use of alternative sourcing models.<br>-CVX can obtain resources to support legacy technologies and leading edge technologies that are difficult to find, develop and retain, from vendors.<br>-Global sourcing can provide cost, quality and time to market benefits not available in local regions.<br>-Vendors are capable of providing rigorous, disciplined software development methodologies (CMM Level 5).<br>-Vendors can help normalize demand, where in-house staff is not adequate for peak/valley workloads.<br>-CVX can leverage vendors investment in technologies and processes (e.g. quality management, change management, other tools). | -Business Units wishing to capture cost savings quickly will initiate independent efforts that could erode our procurement leverage and make it difficult to keep a strategic focus on sourcing.<br>-IT may not fully understand what business processes provide value to the business to help define the appropriate sourcing strategies for IT services.<br>-Global Capabilities Team (GCT) solution not accepted by decentralized business units.<br>- Employee acceptance of GCT recommendations.<br>-Baseline is changing, and therefore the benefits case may erode.<br>-Rapid technological changes are outpacing our internal IT capabilities.<br>-Some stakeholders have not had success with external providers.<br>-The business, IT portfolio and business models are uncertain.<br>-Geopolitical changes could limit our sourcing options.<br>-Current economic climate could cause us too move fast. |

ChevronTexaco was aware of the risks involved with global outsourcing, so it was important to them to identify these risks and how to evaluate and overcome them.

| **Risk** | **Mitigation** |
|---|---|
| Some business leaders are concerned that IT decisions cannot be decoupled from business processes – sub-optimal to consider off-shoring or outsourcing IT without considering business components. | Need to engage relevant business stakeholders early on to understand interdependencies. Work to understand related business sourcing strategies. Consider phased sourcing approaches where early focus is on IT services easily decoupled from business processes. |
| Risk of not having appropriate skills in CVX to make new models work. Examples: Writing statements of work, developing Service Level Agreements. | CVX needs to increase skills and focus in these areas commensurate with extent of potential offshore leverage. Consider a phased implementation approach that aligns with degree of skills needed. |
| Geopolitical risk to operation of shared service centers in some locations. | Incorporate good security risk assessment and business continuity plans. Consider using multiple locations. |
| Infrastructure constraints (e.g. telecommunications, power, etc.) | Incorporate infrastructure assessments. |
| Productivity and morale risk | Open and honest communications. |
| Long term knowledge base – growing dependency on providers | Make knowledge transfer a contractual commitment. |
| Business disruption during process or supplier transitions. | Assess application readiness and business impact. |
| Fragmented or spotty implementation due to inconsistent buy-in. | Governance, metrics, and program management. |
| Being locked into one provider and strategy, costs, services, or business needs change | Have multiple providers |
| Unclear ownership and accountability of future ADM strategy. | CIO's assume responsibility of ADM strategy developed. |
| Changes in Government regulations. | Keep current on changes in Government regulations. |
| Project timing does not match opco needs. | Focus pilots on projects with the most immediate needs. |

ChevronTexaco also evaluated stakeholder feedback…

| | |
|---|---|
| — General support for opportunity<br>— Varied experience with sourcing<br>— Good solution for "someone else"<br>— Strategy is important<br>— Have a long term view<br>— Attention to governance is critical<br>— Co-location is a strength<br>— Need to look at business processes<br>— Customer intimacy is important<br>— Service Level Agreements are key<br>— Factor in transition costs/time<br>— Exit strategies must be considered<br>— Risks must be closely managed<br>— Concerns about project timing<br>— Consider Business Process Outsourcing | — Need business representation on team<br>— Demand is decreasing for 2003<br>— Contractor reductions are rapidly happening<br>— Little stability in current environment<br>— Employees are nervous about their jobs<br>— Little coding work is done by employees<br>— Many employees fill several roles<br>— Need to retain core competencies<br>— CMM capability is low<br>— Need to determine what is core for IT<br>— Business Analysts are still important<br>— U.S. severance payout would be large<br>— Non-U.S. severance might be prohibitive<br>— Nationals must be considered<br>— Look at global IT spend<br>— High satisfaction with engagement |

…as well as employee feedback.

| | |
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| — Management needs to be more visible and communicate more during these changes.<br>— Frustration around why we are running a "fire drill" with cost reduction. Shouldn't this be an on-going part of business?<br>— What is the IT vision and strategy? We need to understand what we want to be in IT.<br>— Real savings will not be realized unless the strategy is mandated.<br>— Avoid sacrificing long-term benefits for short-term cost reductions.<br>— This approach will require a significant up-front investment… we don't believe management is willing to make that investment.<br>— Many employees are concerned about losing their jobs but they are also concerned that we are making reductions with little strategy behind it.<br>— What will be the severance package for those who exit and the future career path?<br>— IT should consider savings from process improvements before outsourcing. | — Employees want to understand what IT roles are important to retain so they can prepare themselves for the future.<br>— Regardless of what you call this effort, from a U.S. employee perspective, this is outsourcing.<br>— Surprised by the number of IT employees outside the U.S..<br>— They recognize gaps in skills, resource, global service levels and support and agree change needs to occur.<br>— Too many ITC people on the team, the team needs more business people and non U.S. people.<br>— Many employees perceive the project as further along than CPDEP Phase 1.<br>— The earlier the communication the better. Even if you don't have answers the dialogue is better than nothing.<br>— Employees suggested using more external perspectives and possibly an IT futurist.<br>— General confusion about all the projects going on in IT.<br>— Appreciate that employees are being involved in the process early. |

Finally, ChevronTexaco felt they should thoroughly evaluate the RFP process. "Providers are making a significant investment to participate in the process, we need to act in good faith. If quality, savings, risks, and flexibility meet the needs of the application owner, it should be understood that we move forward with the providers."

**Maximizing Your Return on Information Technology - Laura Tibodeau, Hewlett-Packard**

To achieve the best possible return on information technology (ROIT), Laura Tibodeau shared the "recipe" used at Hewlett-Packard. The recipe contained four primary ingredients:

(1) maximize workforce productivity
(2) select the right projects
(3) create/execute integration plan of record(iPOR)
(4) achieve world class cost structures.

Mix these ingredients in a large mixing bowl, pour from the mixing bowl into a two-quart casserole dish and bake at 350 degrees for an hour…remove from the oven and serve hot! We all wish it were that simple, but we know that each of the above "ingredients" requires focused attention to obtain.

Tibodeau focused on the last ingredient, achieving world-class cost structures. To achieve world-class cost structures, she shared another "recipe" containing the following ingredients:

(1) manage IT like a business
(2) institute culture of strong fiscal discipline
(3) manage overall workforce costs/rates (including outsourcing selected functions
(4) scrutinize all expenditures by actively improving rates, terms, and conditions.

Tibodeau focused on the last two ingredients of achieving world-class cost structures. To optimize IT workforce costs, she suggested the following:

- create employee skills portfolio to match candidates to opportunities
- metric workforce costs by skill type
- assign employees to top initiatives and innovation functions
- employ college hires in emerging technologies
- move from "free-lance" contractors to managed service contracts
- consolidate supply base for best pricing
- outsource and offshore support and sunset functions
- revisit contract pricing at every renewal opportunity

Tibodeau also emphasized that scrutinizing all IT expenditures on an ongoing basis can have a drastic impact on ROIT. She suggested reviewing software portfolios, software maintenance, services contracts, and pointed out other opportunities to review.

**Review SW portfolio**

- Define software portfolio of internal and external software
- Identify any/all shelf-ware
- Identify SW duplicates in portfolio
- Achieve enterprise license after specified volume purchases

**Focus on SW maintenance**

- Benchmark external maintenance costs
- Pay based on negotiated cost
- Formulate minimum support expectations by function (response time intervals, etc)
- Only maintain active license basis
- Evaluate if downgrade from 7x24 to 8x5 support is possible

**Services**

- Identify competitive rates per skills type, function, and geography
- Create preferred supplier list
- Require strong value propositions of preferred suppliers
- Consolidate technology engagements, where possible
- Use fixed bid turn-key engagements

**Additional opportunities**

- Competitively bid duplicate SW suppliers for best go-forward value proposition
- Consolidate hardware deals with single supplier for best price
- Ask HW suppliers if they can bundle required software to increase value

By following the above "recipes" Hewlett-Packard ESG IT reduced operational expenses by 36%, including a 50% reduction in their contract base, 22% discount in professional services fees for remaining consultants, and $10 million annual reduction in maintenance fees. That's definitely the kind of dish you want to serve up to your boss and shareholders!

**Outsourcing – A Vendor's Perspective: Ravi Pandit, KMIT Cummins Infosystems, Ltd.**

**KPIT Cummins Infosystems Limited** provides software development, maintenance and implementation services for the Banking & Finance, Consumer Packaged Goods, Telecommunications, Manufacturing, Chip Design (hardware and software) and Automotive Sectors. Their headquarters are in Pune, India with two other India offices to house various functions, along with branches in Bangalore and Mumbai. The company's strengths lie in Internet Consulting and Development, Re-engineering & Migration, Software Product Development & Management, Business Intelligence Solutions, Oracle Applications and Embedded Systems. For more information see www.kpit.com.

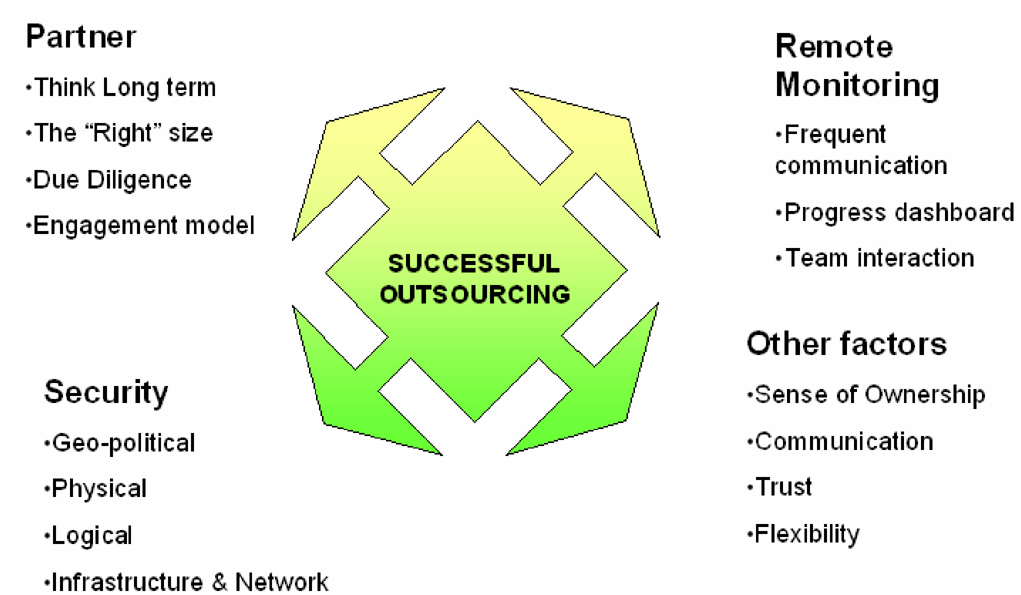
Pandit began by emphasizing that a company should "do what they do best…outsource the rest." Companies should focus on their core competencies, leveraging their own resources, but should look to leverage vendor's capabilities for all non-core competencies. This is how companies can realize significant cost reductions. Vendors often have established expertise in many different areas where a company may not. Pandit pointed out that a good rule to follow is to outsource as long as:

**Cost of In-house Execution > Outsourcing + Interface costs**

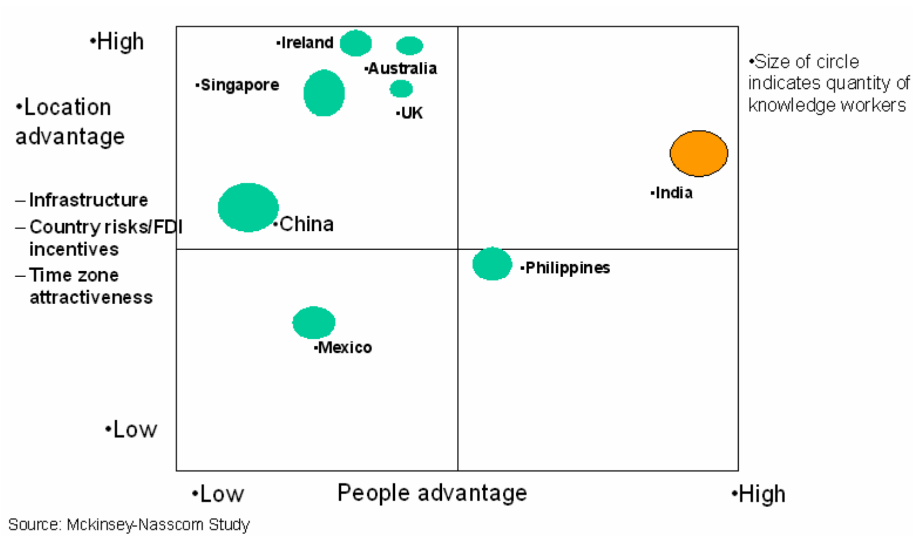
When deciding what to outsource, Pandit said you should consider (1) the projects' strategic importance and (2) the contextual and knowledge base of your organization. He said that outsourcing makes the most sense when the strategic importance is low and the internal knowledge base is low, however do not rule out outsourcing for projects with high strategic importance and low internal knowledge, or projects with low strategic importance and high internal knowledge. The only projects that should definitely be kept internal are those with high strategic importance and a high internal knowledge base.

| Strategic \ Contextual and Knowledge Base | Low | High |
|---|---|---|
| High | Retain/Reskill or Selective Outsourcing | Retain and Build |
| Low | Outsource | Retain or Outsource defined segments |

Pandit also pointed out that there are many vital aspects that must be looked at before considering outsourcing, including the partner/vendor, security, remote monitoring, and other factors. It is critical that a company perform their due diligence before entering into an outsourcing agreement.




Pandit echoed what research has shown. India is the preferred destination for offshore outsourcing. India is politically stable, has established outsourcing relationships with Fortune 500 companies (GE, Citigroup, Bank of America, Boeing…), is technologically mature (with over 80 companies at Level 4 maturity and over 50 companies with Level 5 maturity), and has numerous IT assets.



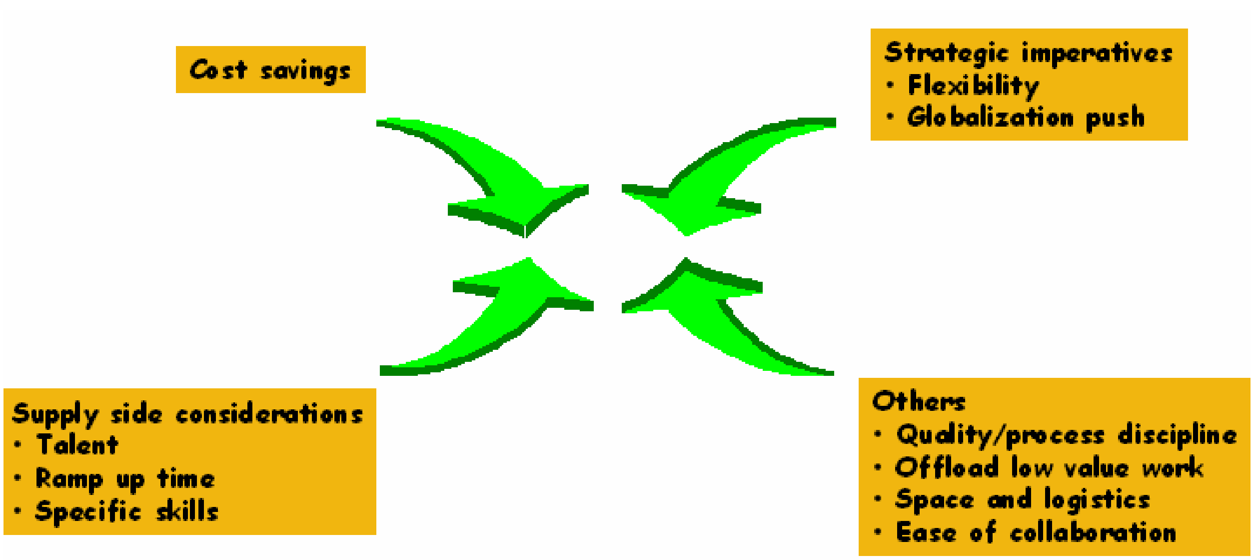
**Offshore Sourcing for IT: Progress and Prospects – Ritu Agarwal, University of Maryland**

Global outsourcing is here. Increasing cost pressure on IT budgets has resulted in companies looking for cost savings…and they are looking in other countries. GE has 7,000 offshore professionals and they are spending hundreds of millions for offshore work with centers in India, Mexico, and China. Intel has a software lab in Nizhny Novgorod. Ford is having CAD/CAM, email processing, and application development done in Chennai.

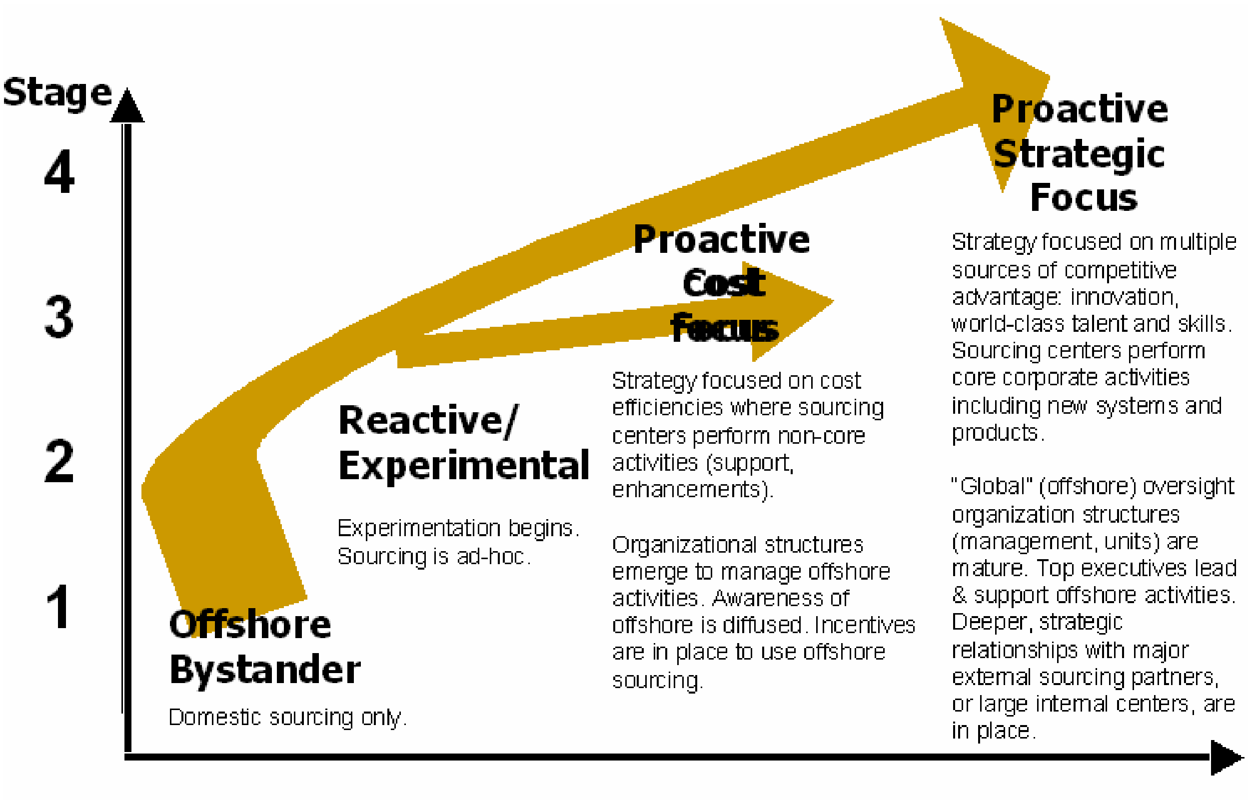
The ability to outsource has been enhanced by three enablers: (1) design modularity, which allows companies to outsource specific "modules" of a project, (2) sophisticated coordination technologies that help monitor the relationship, and (3) the growing maturity of offshore organizations.

These enablers lead to the business drivers:

(1) Cost savings – the labor is significantly less, resulting in up to 70% savings.
(2) Supply-side considerations – the talent is available overseas and there is a variety of specific skills to meet company needs.
(3) Strategic imperatives – outsourcing offers added flexibility and meets many company directives for a globalization push.
(4) Others such as improved quality of work, the ability to offload low-value work, the space and logistics of using workers not in your office, and the increasing ease of collaboration.



Dr. Ritu Agarwal described four stages in the outsourcing acceptance process, which she called the "SITO" model; offshore bystander, reactive/experimental, proactive cost focus, and proactive strategic focus. Once a company reaches Stage 4, then offshore sourcing has become a desirable business strategy, including having substantial wholly-owned offshore units with sophisticated marketing efforts.




Going forward Agarwal said companies should transition from a "should do" to a "must do" mentality towards offshore outsourcing, which will more than likely mean a shift in the company's strategic mindset. But the maturation of offshore labor supply and vendor sophistication is in place to meet the needs of U.S. companies. U.S. companies need to make offshore sourcing a strategic initiative and overcome any fears that my derail their efforts to foster internationalization.

**Conclusion**

Businesses are feeling the pressure to lower technology costs and improve ROIT. Global outsourcing is a viable option to achieve this. As an added benefit, along with the lower costs, companies are seeing higher quality software development coming from offshore software developers. With this being the case, it seems that global sourcing of information systems is a sound business decision and will continue to grow in popularity among American businesses.