

Offshoring Limitations

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ABSTRACT

Using offshore locations to provide high quality products and services at a lower cost makes good economic sense. The current global environment focuses on reducing costs and having a lean organizational structure. There are, however, numerous repercussions being felt by American IT workers due to an increase in offshoring activities. This paper focuses on the impact of offshoring and the weighing of costs and benefits as a result of offshoring activities. Minimizing costs is often cited as the most important reason for American jobs to be outsourced, but a major factor behind offshoring is the intense global competition among nations in a period of slow economic growth. This competition forces global firms to keep a constant watch on costs to achieve a higher degree of efficiency.

Keywords: Offshoring, Outsourcing, IT Workers, global environment

INTRODUCTION

The outsourcing of Information Technology (IT) activities to offshore locations continues to gain momentum, with associated backlash by the workforce in the United States. Based on their survey, Global Insight, a private consulting firm, estimated that U.S. companies will spend about \$38.2 billion in offshore IT services by 2010, compared with about \$15.2 billion in 2005. This is primarily because the expected cost savings will grow by \$11.7 billion in the same time period. As staggering as these figures are, Blinder (2006) writing in “Foreign Affairs” characterizes them as barely the tip of the offshoring iceberg. He describes the upcoming changes that the offshoring phenomenon will bring as nothing less than the third industrial revolution that will transform society beyond recognition. There are numerous repercussions being felt by U.S. Information Technology workers due to both outsourcing and offshoring. This has resulted in a severe backlash by the workforce in the United States. Minimizing costs is often cited as the most important reason for American jobs to be outsourced. But the real reason behind offshoring is the intense global competition among nations in a period of slow economic growth. This forces the global firms to keep a constant watch on costs and to minimize them in order to achieve a higher degree of efficiency. Using offshore locations to provide high quality products and services at a lower cost does make good economic sense as the current global environment stresses the need to focus on reducing costs and having a lean organizational structure.

OFFSHORING LIMITATIONS

High tech professional’s insecurity levels are rising due to the fact that their jobs may be offshored at any time. Many have had first hand experience with the consequences of offshoring. Several authors argue that the benefits of offshoring from the firms’ perspective are not as good as they seem (Garison, 2005; Morello, 2003). They state that it is easy to hire a foreign worker with solid experience for about one-third the cost of hiring a US worker, but that many overseas personnel do not know the business applications, market situation, or the customers of the business (Aspray, Mayadas and Vardi, 2006). In the early stages of offshore outsourcing, there may be unforeseen costs when knowledge is transferred from people on staff to members of the outsourcing team. There may be extensive travel and cultural or language training. Other issues may have to be considered such as deploying additional network bandwidth and additional security technologies. It also important to consider country-specific communications and data encryption regulations and requirements.

There are significant costs associated with educating overseas personnel with the business of doing business before they can start engaging in productive activities. Coordination of efforts take time and money in order to provide useful benefits, resulting in a reduction of potential savings by as much as fifty percent. Code that is developed offshore has often not been documented properly, as many employees do not have a solid command of English. There are other factors that hinder successful offshoring projects. These include the issue of offshore employees not understanding the project requirements completely, thereby underestimating the time and effort required to finish the project. Cultural differences can result in differences in the development and communication processes. As IT professionals in developed countries lose their jobs, students in the universities of developed countries are losing interest in IT related careers. As a result the future talent in IT sector is being lost in these countries (Morello, 2003).

The biggest impediment to offshore savings is productivity. Work cultures vary depending upon the country. Lack of developer experience by offshore vendors may lead to application development inefficiencies during the first several years of the contract. Language and cultural differences can also be costly if lack of proper communication between U.S. companies and their offshore partners results in executives of these companies being required to travel to offshore sites in order to communicate and achieve the desired results (Overby, 2003).

Knowledge that needs to be retained, but is instead outsourced, has become a major problem for CIOs of companies. Companies face another workforce-related risk thru outsourcing due to the exposure of their intellectual property to foreign countries. Diane Morello (2003) states that there are six areas of core knowledge that companies need to protect:

- Enterprise knowledge.
- Cultural knowledge.
- Social network knowledge.
- Strategic knowledge
- Industry and process knowledge.
- Activity knowledge

POTENTIAL BENEFITS

There are several benefits associated with offshoring, such as the ability to relay work to various locations globally and across time zones. There is the opportunity to analyze local requirements and customize products and services to meet local needs. The benefits of free global trade such as lower costs, higher labor productivity, and more efficient production, encourage businesses to utilize the offshore resources for their progress. Benefits are reflected in the domestic market by products and services which are offered at lower prices and lower interest rates (Marshall, 2003). For businesses operating in increasingly competitive and low-inflation global markets, the potential benefits of offshore IT software products and services could result in lower output prices for the goods and services that they produce. The advantages that corporate businesses obtain from offshoring activities could possibly start a chain reaction that could be absorbed throughout the economy over time (Balasubramanian, 2004).

While offshoring will continue to displace workers in the IT software products and services profession, the cumulative gains to the economy and the American people as a whole could possibly fuel job creation throughout the American economy. The potential net employment gains are not limited to one particular area, but are expected to reach a wide range of professions and sectors. Much of this is predicated upon the government playing a key role in encouraging the next generation of workers to enter the IT sector (Global Insight Group, 2004).

CORPORATE REASONING

Corporations have a number of reasons for choosing to send business offshore, each company differing with others on its reasoning. There are certain common reasons why companies decide to outsource offshore. In many areas of the world, research and technical talent and other facilities cost appreciably less. Many foreign governments offer businesses attractive financial incentives to locate R&D, technical services, manufacturing etc. within their borders.

There are a number of highly talented researchers and technical workers outside of the United States. Many nations, such as China, produce more physical science and engineering graduates than the U.S. every year. In order to maintain and improve their market supremacy, U.S. companies need to tap into the best and the brightest talent available, regardless of where they live. Leading U.S. companies, such as GE, Microsoft, IBM are investing heavily in new research facilities in emerging technology clusters such as Bangalore, India and China (Balasubramaniyan, 2004). Many businesses believe they need to globalize their research efforts to overcome restrictions by foreign governments to doing business, and to ensure the needed regulatory approvals in the future (Overby, 2004).

Investments by foreign governments in building their own infrastructure is on the rise. Governments are spending heavily on their university and lab research facilities, on transportation, and on energy and telecommunications to more effectively compete. New global clusters attracting foreign investment and knowledge work are those with the most advanced infrastructures. Many of the top-tier outsourcing companies attribute their moving offshore to less burdensome taxation, regulation and litigation environments in foreign regions. There are however, concerns about whether nations that lack freedom, robust intellectual property rights, and thorough worker protections can sustain long-term innovation leadership (Blinder, 2006).

EMPLOYEE PERSPECTIVE

The more companies view outsourcing as beneficial, the more current employees seem to view it unfavorably. In many cases, the negative attitude of employees may be a result of the company's apathy toward them. There have been a number of cases where employees have been asked to train foreign replacements, and were later fired from their jobs. It is difficult for employees to think about the company's benefits when their jobs are on the line. Companies that have their employees train replacements should consider the quality of training being imparted. Disgruntled employees may not be very efficient in their training or may deliberately impart wrong training (McMahan, and Hudson, 2003). It is difficult for employees to be productive when they are constantly worrying about the future of their jobs. Companies have found it difficult to find a way to reap the benefits of outsourcing while maintaining current employee productivity levels. The newly trained replacements may also cause a problem. After they have been working for a while, replacements may begin to resent the fact that they are paid less than their U.S. counterparts to do the same job. Companies planning to undertake offshoring may incur some unanticipated costs (Blinder, 2006). These costs include paying these prior workers severance and retention bonuses. Employees should be kept long enough to share their knowledge with their replacements. Layoffs may also result in morale problems among in-house "survivors," which may lead to disaffection and work slowdowns. Finally, the whole transition period may take longer than a company expects (Overby, 2003).

CONCLUSION

Early offshoring consisted of simple outsourcing contracts involving straight-forward simple tasks along the lines of call centers, help desks and simple software maintenance. Gradually, simple software maintenance became even more sophisticated software development. As the education and sophistication level of foreign software developers increased, offshoring increased in volume and involved more sophisticated development. New technologies that increased bandwidth and the ability to offshore new and more complicated processes further increased the volume and sophistication of offshoring work. At the same time competition between client companies to obtain the services of vendor companies and increasing wages of foreign software developers has switched the primary focus and benefit of offshoring from one of cost savings to one of strategic importance.

Offshore IT resources should be used to support a domestic company's software development and maintenance activities, but not replace them altogether. If a firm works with an offshore partner to help support development activities, the domestic company must have control over the recruitment process. This can be used in conjunction with working with a domestic company which hires its own development team. This way the domestic team is responsible for all the support activities.

Domestic management, once deciding to offshore, must seize the communications initiative to control the rumor mill better and ease needless employee worry. Employees need to know how offshoring will fit in the overall corporate picture, what tasks are being offshored, and what the company will do to help any employees who may lose their jobs because of offshoring.

Finally, to protect and nurture domestic intellectual resources and talent, domestic firms have a major responsibility to encourage students to major in subjects, such as IT, that they believe will be, or will continue to be, of vital importance to the future strength of the economy.

AUTHOR INFORMATION

Richard G. Vedder is a Professor of Information Systems at the University of North Texas. He received his Ph.D. from the University of Arizona. His research interests include multimedia systems, knowledge-based systems, impacts of new technologies, and competitive intelligence. He has published articles in *Decision Sciences*, *IEEE Transactions on Systems, Man, and Cybernetics*, *Expert Systems: The International Journal of Knowledge Engineering*, *Computers and Society*, *Journal of Information Systems Management*, and *Communications of the ACM*.

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REFERENCES

1. Aspray, William, Mayadas, Frank, Vardi Moshe Y., Editors, *Globalization and Offshoring of Software A Report of the ACM Job Migration Task Force*, ACM 2006
2. Balasubramanian, S. M., 'Offshoring's positives outweigh its negatives', *Network World*, May 7, 2004.
3. Blinder, A. 'Offshoring: The Next Industrial Revolution?' *Foreign Affairs*, 85 (2). (2006).
4. Garison, John, 'The realities of Offshoring', *The Nor'easter*, Vol. 19 No. 3 2004.
5. Global Insight Group, 'The Comprehensive Impact of Offshore IT Software and Services Outsourcing', *Information Technology Association*, March 2004.
6. Marshall, Jeffery, 'Offshoring' Drive for Savings Accelerates', *Accounting Smartpros*, September 2003.
7. McMahan, Steve, and Kevin Hudson, 'Offshoring and the Future of the US IT Worker', *CIO UPDATE*, December 4, 2003.
8. Morello, Diane, 'U.S. offshore Outsourcing Leads to Structural Changes and Big Impact', *CIO*, September 1, 2003.
9. Overby, Stephanie, 'The Hidden Costs of Offshore Outsourcing', *CIO*, September 1, 2003.
10. Overby, Stephanie, 'India Sees IT Wages Rise', *CIO*, February 1, 2004.