Whitepaper

Considerations When Developing Software Offshore

Despite the well documented challenges of offshore outsourcing, many companies continue to initiate software development projects offshore—often lured by the promise of cost cutting. A slower than expected economic recovery in the U.S. has contributed to companies making "offshoring" a key part of their overall corporate strategy. However, the moment stateside management takes its eye off the ball is usually the moment when the benefits vanish and the surprises appear.

IVS highlights some of those pesky pitfalls in considering a move offshore and bases its findings upon tabulated client feedback over a two year period and industry trend assessments.

July 2013

integrated voice solutions

Table of Contents

"Although wages are generally 80% lower in India compared with the United States, total labor cost savings are just 10% to 15% for most U.S. companies that outsource to India."

— Deloitte Consulting

While offshore rates are typically lower than in the United States, companies should weigh other factors before making the leap offshore.

Here is a Top 10 List of Offshoring Pitfalls:

> *"A survey of over 5,000 IT users in North America and Europe has found that 36% of offshoring projects fail."*
>
> *— Silicon.com*

1. Location and Time Zone Differences

Developers in Eastern Europe and Asia are literally on the other side of the world, which means that they are typically asleep during our business day. In order to communicate with them, you will need to stay up late to catch them at the beginning of their day, or get up early to catch them at the end of their day. In either case, you will rarely be awake in the middle of their day; therefore, if they run into problems or have questions, you may lose up to a day of productivity. This happens quite frequently with offshore development efforts, resulting in projects typically taking longer than expected (project creep).

In addition, scheduling onsite meetings becomes impossible without incurring significantly higher expenses than when using onshore development staff.

2. Staff Attrition

Because the market is strong for development personnel overseas, good developers tend to change jobs frequently in order to drive up their pay. It is typical for companies to include training clauses in their contracts that require a minimum one-year commitment; however, in those cases, developers tend to simply change companies on an annual basis instead. Project continuity therefore becomes an issue, coupled with the time and expense required to train new developers.

This problem becomes compounded during larger projects as timelines extend further into the future.

3. Language Barriers and Cultural Differences

Out of a desire to obtain work and save face, offshore developers frequently overestimate their command of the English language. The result is code development that you did not want, or you spend far too much time explaining and re-explaining yourself

"Cost was cited as the main reason for sending projects offshore, although the research showed that expected cost benefits usually weren't realized."

— Silicon.com

in an attempt to correct constant misinterpretations. Telephone conversations are difficult. A good portion of communication has to be written and this will add overhead to your project lifecycle.

The American culture places a high premium on execution, deadlines, and keeping commitments. This is not true of all cultures; some place a higher premium on being pleasant and non-confrontational. As a result, offshore developers may tell you that they can do something that they cannot do, or will be afraid to ask a question that could make them appear lacking in the area of expertise you are seeking. This is a recipe for disaster. At first, you will believe you are getting everything you want—until you find out that due to the developer either overpromising or failing to ask questions, you take delivery of a project that is below your expectations, over-complicated, and oftentimes, incomplete.

During a technology migration, it is equally necessary to understand previous development efforts. Language and cultural differences can make migration projects particularly difficult.

4. Lack of Control and Dispute Resolution

What do you do if an offshore company halts development, stops answering your emails or calls, and refuses to give you the code that they had developed up to that point? Answer: There is not much that you can do. In the U.S., you could have your attorney write a letter, or you could sue the development company or report it to the Better Business Bureau. If a local company, you would be able to walk down to its office and give that vendor a piece of your mind. Virtually none of these options are viable with an offshore company. This can make your company vulnerable.

Offshore companies are not subject to U.S. Intellectual Property (IP) laws. Therefore, you will need to ensure that you maintain ownership of all IP that is generated in the project and that you have legal recourse to completely control it according to the law that governs your chosen offshore company.

5. Increased Project Management Cost

Shipping projects offshore may reduce the cost of development that your firm will need to take on, but it will also increase the level of oversight that you must provide. Keep in mind that the vendor will not have the business knowledge that your staff does. If you let the offshore vendor make all of the decisions, you will be doomed for failure. Although this requirement may increase your project management scope, make sure that you or your staff approves all decisions.

6. Lower Proficiency

Overseas, specific expertise with custom development platforms is less advanced than in the United States. Knowledge of proprietary legacy platforms is paramount when executing a technology migration project. Using overseas resources for complex application development almost always incurs more hours for the same deliverable. Quality is at stake if offshore staff rolls out code that actually needs more testing.

Using overseas resources for complex application development almost always incurs more hours for the same deliverable.

Increasing project hours also extends your timeline. Using developers who are experienced with the platform you are moving to, as well as with the platform that you are moving from, will decrease project duration and help you meet deadline requirements.

7. Lack of Strategic Partnerships

Partnerships are usually a lower priority for overseas development groups. By using a U.S.-based company, you may be able to leverage existing relationships that offer you lower platform costs, lower annual fees, or more convenient methods of payment.

8. Lack of Internal Staff Cooperation

Employee communication should be a major focus for corporate leadership during the offshore transition phase. Companies must have a strategy for letting all employees know (especially those who may be at risk) the reasons for outsourcing and the process that will be followed. It is not an easy task, but it is a necessary one. Ideally, the communication effort should begin before any potential vendors become involved. Failing to communicate with employees about offshoring will invite more problems in the knowledge transfer phase.

Many employees who have been affected by offshoring attribute their dissatisfaction to poor corporate communication. Too often, outsourcing is treated like a dark secret, with corporate rumor mills breeding fear and distrust. Employees want to know what is happening, why, and how it affects them. Problems occur when

Stability of the current regime, risk of asset nationalization, threat of war, strikes, terrorism, or medical outbreaks—all are possibilities that companies have to consider.

leadership does not inform middle management and lower-level employees of the offshoring plan. Companies must step forward and clearly state their objectives. These may include saving on costs, becoming more competitive, giving customers better service, or providing a better return for stockholders. Your employees must be able to understand why their company is putting so much effort into launching and managing an offshore initiative.

Yet even the best communication will not prevent those employees who are affected by the offshore outsourcing decision from being understandably upset. Having onsite employees train offshore replacements may be a good way to transfer knowledge, but it's also a good way to generate animosity from the onsite staff.

Some companies attempt to mitigate these situations by providing additional compensation to onsite staff that remains to train their offshore replacements. Another suggestion, from former Democratic presidential candidate John Kerry, is for companies who are outsourcing jobs to provide affected employees with at least three months' advance notice. Neither solution is perfect, but any effort that a company makes to defuse these volatile situations and communicate honestly with onsite staff is a better alternative than no effort at all.

9. Lower Security Concerns

Security is another issue that can derail offshore ventures. Offshore destinations differ greatly in terms of political and economic stability. Generally, Canada and Ireland score high on security fronts, while Russia, China, India, Brazil, and the Philippines receive lower scores. For example, Delta Air Lines recently backed away from a proposed call center in the Philippines after its security personnel expressed concern about the existing political environment. Stability of the current regime, risk of asset nationalization, threat of war, strikes, terrorism, or medical outbreaks—all are possibilities that companies have to consider when they conduct vendor due diligence.

Good vendors attempt to alleviate these fears by explaining their disaster recovery capabilities, infrastructure reliability, and security plans. Companies who are apprehensive about sending work offshore can form a better picture of security issues that may await them at their chosen offshore destinations by conducting political and economic risk assessments. Both parties will benefit by taking steps to address the very real issue of electronic and physical security.

10. Poor Transition Management

Transition management, a critical factor in the success of offshore initiatives, is defined as the detailed, desk-level knowledge transfer and documentation of all relevant tasks, technologies, workflows, and functions. Despite rigorous due diligence, vendor reviews, and multiple test projects, the real work begins once a contract is signed.

The transition period is perhaps the most difficult stage of an offshoring endeavor, taking anywhere from three months to a year to complete. There are many issues to consider when moving to a new vendor. For example, current employees must be a willing part of the process, and, as discussed, communication will be critical.

"45% of companies with an offshoring strategy claimed success while 36% said their strategies were failures."

— Silicon.com

Another key aspect of transition management is knowledge transfer, or bringing the vendor's employees up to speed on your internal procedures—a step that U.S. credit card company, Capital One, may have rushed. A Capital One spokeswoman verified that the company stopped routing telemarketing calls through its offshore vendor Wipro Technologies after discovering that the actions of certain Wipro employees did not conform to the company's standards and practices—namely, offering potential customers free gifts and reduced membership fees without prior authorization.

Knowledge transfer also involves technology transfer and documentation. If the vendor will be assuming licenses or operations of client-owned systems, applications, or infrastructure, then all in-scope systems must be identified and documented. Licenses, maintenance agreements, hosting, and telecom infrastructure may be part and parcel of the transition.

In a 2003 interview with E-Business Strategies, an offshore IT vendor revealed that in one outsourcing engagement, the client failed to disclose that part of his code was customized. The client did not realize that his maintenance contract with the supplier stated that the code could not be removed from the United States, so the supplier abruptly halted the offshore maintenance agreement. The three parties eventually worked out a satisfactory solution, but the client's failure to delineate which technology would remain in-house significantly delayed the project. This example underscores the importance of smooth transition management. Also, support for some U.S.-based businesses may be required to remain in this country. This is the case for certain banks and financial institutions.

"If you are anticipating offshoring savings of 50% or more, you are not being realistic."

— Silicon.com

Conclusion

As offshore outsourcing evolves in the marketplace, so too do the challenges. The downsides to offshore software development can be boiled down to one of three core areas: greater management overhead, under-skilled staff or language/cultural issues.

It is possible that with a keen eye and careful in-house management, an enterprise could realize cost savings through offshoring their development. However to achieve such a milestone, management must be unrelenting in communication, continually dynamic in adapting local teams to a changing landscape, and prepared to burn the midnight oil to work through and mitigate issues. Meanwhile cost savings, while achievable, are never as great as the attractive hourly rate sticker price would seem to suggest.

Market leaders who have experienced offshore success have painstakingly evaluated vendors and offshore destinations, dedicated substantial time to upfront planning and expectation management, and established built-in, clear communication and transition processes. They also set realistic expectations regarding both cost savings and project timelines.

By anticipating and resolving some of the above problems, you may be well positioned to benefit from the promise of offshoring development. If not, a move offshore could be a substantially costlier proposition than staying "at home."

About Integrated Voice Solutions

Integrated Voice Solutions (IVS), a Boston-based company, was founded in 2004 with the goal of coupling a world-class professional services team with a belief that, through the acceptance of open standards, clients can maintain technology on their own terms. IVS has core experience in data access methods, application design and development, and multi-channel implementations. To learn more about IVS please visit us at http://www.integratedvoicesolutions.com.

Contact Information

Christopher Edge
Chief Technology Officer
Integrated Voice Solutions
sales@integratedvoicesolutions.com
(p) 781-853-0400

Eliminate the Guesswork

***Contact us today** for a free, no-obligation Project Assessment using Function Point Analysis (FPA). FPA provides an accurate method of projecting cost and risk.*