

# OFFSHORE SOFTWARE DEVELOPMENT: Managing the New Attitude



Executives across Europe and the U.S. are discovering that outsourcing is really about corporate growth, not just cheap labor abroad. Backed by data from scrutinizing thousands of outsourced software development projects completed offshore since the turn of the century, a more strategic viewpoint has emerged, with force, over the last several years. Now the challenge is to learn how to set up and manage strategic outsourcing relationships for optimal return.

## SOFTWARE DEVELOPMENT: MORE AN ART THAN A SCIENCE

Software development is a highly complex field resisting standardization. While development methodologies continually emerge and are perfected, various estimates say that from 50% to 70% of all software development projects have been unsuccessful. Approximately half of these projects fail outright and never see completion, while the other half dramatically miss estimated budgets and schedules.

When software development projects are outsourced, especially to an international location, even greater complexity and risk are introduced to the process. However, offshore outsourcing has become a global trend because corporate strategists have analyzed the high failure rates, and have learned to mitigate their risk by developing methodologies and business models to improve the metrics.

Software development projects fail for many reasons, from poorly planned and executed provider selection, to unrealistic expectations regarding cost savings and a lack of understanding of costs specific to offshore engagements. Misaligned corporate cultures, poor lines of communication, and a lack of process maturity have been particularly damaging to projects sent abroad.

### TOP 10 REASONS WHY OFFSHORE SOFTWARE PROJECTS FAIL

#### PEOPLE

1. Wrong build / buy / partner decision
2. Poor project and/or team selection
3. Failure to align cultures

#### PROCESS

4. Underestimating the Offshore Development Center (ODC) startup effort
5. Misaligned SDLC documents or processes
6. Failure to integrate the ODC with internal staff
7. Failure to manage expectations

#### TECHNOLOGY

8. Ad hoc collaboration / communication tools
9. Little or no effective SDLC acceleration or support tools
10. Little or no effective services automation platform

## MANAGING RISK. MANAGING FEAR.

All offshore software development is risky. Fear of offshore engagements is legitimate: Is this the right provider? Will this provider be fair and diligent in their dealings with us? Is the provider in business for the long term? Do they have the capacity to hire and retain the best people for my project? Will they properly observe IPR laws? How do I guarantee that the association produces the working system that I need, either to sell to my customers (if I am outsourcing the development of a software product) or to solve my critical internal business needs? Simply put, will they do a good job?

Companies turn to outsourcing for various reasons. Whether their outsourcing initiatives are motivated by cost cutting, access to skilled resources, or access to best practices, any company engaging in an outsourcing relationship must mitigate against its fear of failure, and can do so by crafting a contract that takes into account every aspect of the relationship.

A well-designed contract will cover contingencies, such as timely performance, quality, and adherence to schedule, while leaving room for communication and trust, the basis of any successful business relationship.

At the beginning of the relationship, the client and the provider will be "black boxes" to one another. The interaction is fully governed by the contract and the corresponding Statement of Work. However, in order to maximize the value-add the provider can bring, the parties must work to bring the relationship into true partnership.

## CONTRACTUAL RIGIDITY LEADS TO LOSS OF PRODUCTIVITY AND CREATIVITY

The greatest and most obvious fear in turning to an offshore provider lies in accurately assessing the provider's reliability. Will I get the software when they say I will, will the software work, and will it work in ways that I designed and envisioned?

A common way to manage this kind of fear is to write out very detailed specifications for the project to be outsourced, and then hold the provider contractually accountable for delivering on those specifications. However, although this approach is driven by the desire to manage risk, making the specifications and the contract the center of the relationship is in itself tremendously risky from the business standpoint. In today's increasingly fast-paced business environment, those specifications may very well be obsolete

by the time they are completed, and then the execution under a contract with rigid, detailed specifications, although strictly enforced, may bring no value to the client at the end of the day. It is far better to allow the provider the flexibility to work with you as situations change.

StarSoft has worked with Computer Sciences Corporation (CSC) for over 8 years. As one particularly large and complex project reached a critical client onsite delivery assurance audit, CSC and StarSoft agreed that the fixed price contract under which the companies had been operating was too rigid and counterproductive to the fluid nature of the project and its scope.

By mutual recognition of this incompatibility, CSC and StarSoft moved to a time and materials contract to allow a fuller partnership between the two companies.

The project's management on both sides was reorganized to facilitate a shared vision through increased strategic communication, bi-directional reporting structures were established, and StarSoft's project team assumed greater involvement and responsibility for the project's success.

## EVOLVING FROM "US VS. THEM" TO PARTNERING

Rigid contracts often go hand in hand with an "us vs. them" mentality. Most successful offshore practitioners observe that this attitude is the one most detrimental to the success of an outsourcing exercise. The characteristic stereotypes for such situations are as follows:

- "We write the specs...they do the work"
- "We set the vision...they execute"
- "We communicate with them only on a 'need to know' basis"
- "What possible value could there be in treating them the same way we treat our own staff?"
- "Why communicate, encourage, motivate, or bother to build a team when all they are is just hired help?"

Such attitudes preclude the client from unlocking the true value of the outsourcing relationship. As any employer will screen their potential new hires and run background checks to verify their credentials, qualifications, and overall integrity, in time that new hire will become most productive if they

truly share in the organization's visions and goals and are enjoying the level of involvement in the decision making that is commensurate with their qualifications and degree of contribution. By the same token, while it is highly advisable to do thorough due diligence on the potential offshore software service providers at the beginning of the relationship, and hold them strictly accountable for deliverables under contracts, the real value of the relationship will unfold once the companies transcend the traditional buyer-vendor paradigm and pass into the true partnership stage.

A true win-win partnership, therefore, sounds more like this:

- "We want our offshore team to know about our day-to-day business, our culture and our strategic vision"
- "Our offshore team adds significant value when they know where we want to go"
- "With open communication, our teams onshore and offshore can help anticipate issues and better respond to change"
- "Strong personal relationships, particularly at senior management level, are the foundation of every successful business. Our relationship with our offshore development partner meets that criteria."

## BENEFITS OF THE PARTNERSHIP APPROACH

Constant nurturing of open communications and a commitment to a long-term relationship over time will lead to shared business knowledge, and provide developers with a better understanding of the requirements, faster implementation times, and less unnecessary project dialogue. Both the client and the provider will be able to respond to change much faster. Without sharing specific business knowledge and exhibiting organizational openness throughout the outsourcing relationship, the project has "all the agility of an oil tanker", as one of StarSoft's clients has aptly put it. Change is the ever-present factor in any business, and the outsourcing provider's ability to adapt painlessly to changing requirements is vital to the client's success.

An interesting paradox: increased communication, though seemingly an activity that takes up extra time, actually leads to lowered unnecessary communication, as requirements are better understood the first time, and less iterations are needed to clarify and verify the provider's understanding of them.

Open communication and involvement leads to heightened motivation and improved morale, which in turn brings higher

productivity. The more software engineers are allowed to see the bigger picture and are informed of the actual impact of their work, the more they are committed to the work, and the more they can achieve.

### AGILE DONE OFFSHORE: THE QUINTESSENTIAL PARTNERSHIP

The implementation of Agile development methodologies in an offshore outsourcing, or distributed, environment is perhaps the ultimate example of partnership between the buyer and the provider of outsourced software development services. The common wisdom is that the two concepts are simply incompatible. Traditionally, in order to optimize processes, improve quality, and improve time-to-market, IT organizations have turned to offshore outsourcing *or* Agile application development methodologies, but not both. Certainly, given Agile's intense interaction and reduced documentation requirements, the two approaches have seemed opposed to one another exactly because of the "fear factor": outsourcing the development of a vaguely defined piece of software is instantly perceived as high-risk.

However, certain companies have emerged in the offshore outsourcing space that successfully exploit the value of the Agile paradigm, maximizing the value they add to their clients' business and promoting lasting, win-win partnerships. StarSoft is a very vivid example of such a company.

"Properly injecting Agile techniques into an offshore development project can add improved responsiveness and business/IT alignment to the list of offshore benefits - benefits that were heretofore impossible to achieve."

*Source: Forrester Research, Inc., 2004*

The essence of Agile development is the concept that the client / end user of the software and the team that builds that software are intricately connected and engaged in intense communication on a regular basis, to ensure rapid bi-directional feedback between the users and the developers. This communication provides the means to quickly correct any discrepancies or problems, as well as to introduce change into the software as the business situation of the client changes. At the same time, the client

When Dynix, world leader in the library management software based in Provo, Utah decided to outsource part of its product development, the company's management team traveled all over the globe to find the right partner. After looking at India and China, Dynix turned to Russia. In total, over 30 outsourcing firms were interviewed before Dynix chose StarSoft. The key factors in that decision were StarSoft's track record and its proven proficiency in Agile development methodologies.

*"Dynix is collaborating with StarSoft on a very large system software development project which is on schedule and moving quickly. I have been doing software development for over 30 years now at both large companies like IBM and startup companies like MobileWare, and have never experienced a smoother engagement. All joint development projects are being efficiently tracked and are on schedule. I am extremely pleased with our partnership."*

*Jack Blount, CEO, Dynix*

retains the fullest amount of control over the project scope, timeline, and budget.

### THE RUSSIAN CONNECTION

Russia is emerging boldly as a new global software outsourcing destination. Although relatively small compared to the traditionally favored Indian outsourcing industry, Russia has positioned itself as a strong global player with competitive advantages that set it apart from more traditional outsourcing geographies. Corporate strategists have learned first hand that moving to Russia does not contribute to the risk of complex development projects, but in fact, mitigates against it.

Since the early 1990s, Russia has attracted leading international technology companies, starting with the R&D operations of Motorola and Intel. By 2004, IBM, Sun, Alcatel, Samsung, T-Systems and many others had made substantial investments in their software development centers there. Why Russia? The consensus is that Russian staff contribute a very high level of training in fundamental math and physics, not just coding, and that the best Russian companies promote an environment of teamwork and communication on both business and technical issues. Russia gets high marks for

its quality assurance processes, state-of-the-art infrastructure, and the availability of competitively priced, highly skilled labor.

StarSoft has contributed to this national recognition and its clients are benefiting from it. Incorporated in the United States with headquarters in Cambridge, Massachusetts and development centers in St. Petersburg, Russia, and the Ukraine, StarSoft has built a strong clientele completely outside of Russia and has tripled in size over the past three years. For its clients, attention to relationship, by StarSoft management and staff, has overcome the fear factor inherent not only in offshore outsourcing, but in the move to a less traditionally known geography. StarSoft's clients see for themselves that Russians are culturally attuned to Europe and the United States, that Russian engineers are uniquely qualified to take on complex software development projects and add specific value to the project at hand, and not least, that the time and travel zone works in favor of the relationship.

## CONCLUSION

As corporations move to offshore outsourcing for strategic value rather than simple cost cutting, companies of all sizes and in all industries need to examine the offshore option very seriously. Risks can be mitigated by choosing the geography carefully, and by carefully crafting contracts that emphasize communication as well as specification; contracts that call for regularly scheduled personal exchange, and are written in the spirit of trust. The global trend toward strategic outsourcing is real and moving fast; it threatens to leave behind those companies that do not embrace it. It's in your interest to find out today what offshore outsourcing can bring to you.

Russia has one of the largest, growing developer populations in the world. IDC estimates that Russia will experience approximately 40 percent growth in its developer population between 2005 and 2008. Developer growth is also fueled by Russia's large IT student population, as more than 1.3 million students have graduated from Russian universities with information technology related skills over the last seven years.

*Source: IDC, Professional Developer Model, December 2005*

## BENEFITS OF RUSSIA

### STRONG CUSTOM APPLICATION DEVELOPMENT SKILLS USING MODERN TECHNOLOGIES

Technologies used include .NET, Java, and Internet architectures. For example, EPAM has developed a mobile payment system for Internet devices such as mobile phones, PDAs, and WAP devices; StarSoft has developed a Laboratory Information Management System (LIMS) based on BEA WebLogic and Oracle 9i. VDI has built a highly scalable, Software-as-a-Service (SaaS) system using Oracle VDB (Virtual Database for multi-tenant applications).

### A LARGE POOL OF TECHNICAL TALENT TO DRAW UPON

UNESCO figures show that half of Russian students major in sciences and math. That is 20% more than students in China, and at least twice the amount of India, Japan, or the United States. Some 1.3 million Russians have degrees in computer science or engineering, yet only 70,000 currently work in IT-related jobs.

### GEOGRAPHIC AND CULTURAL PROXIMITY TO WESTERN EUROPE

Three major centers for technology: Moscow, St. Petersburg, and Novosibirsk. These cities are home to Russia's major universities.

### EMPLOYEE RETENTION

Because the IT services market is much less developed, there are fewer jobs. As a result, it is easier to retain employees than in India or other markets. Employment alternatives are limited, and employee attrition because of job-hopping is much less in Russia.

*Source: AMR Research, 2005*

## ABOUT STARSOFT

StarSoft Development Labs, Inc. is one of the fastest growing software outsourcing providers in Russia and Eastern Europe. Headquartered in Cambridge, MA, USA, StarSoft operates development centers in Russia and Ukraine. StarSoft offers particular expertise in developing complex custom applications for healthcare, telecoms, financial services, real estate, and other verticals.

For further information, contact Peter Vaihansky in the US at 617-577-9497. You can also visit us online at [www.starsoftlabs.com](http://www.starsoftlabs.com).