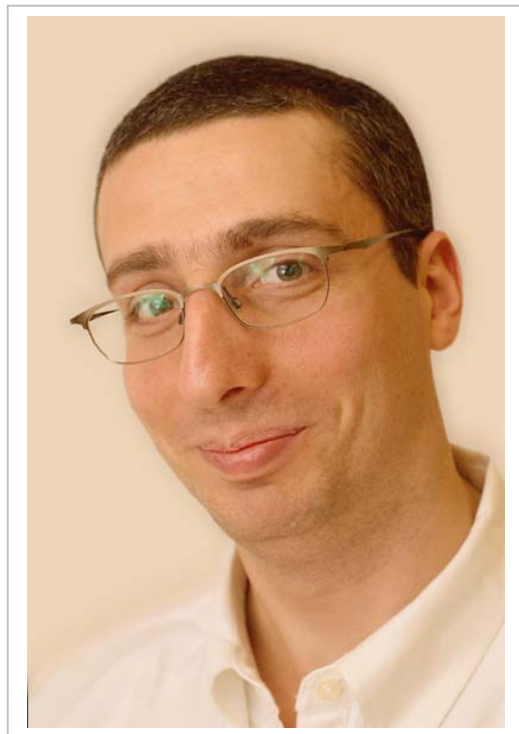


# Best practices for offshore software development outsourcing



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## ***Decision making***

### ***Cost reduction***

The offshore software development industry owes much of its existence to cost reduction. The other side of this savings is the difficulty of risk identification. At the very least, you need a person – be it a full-time staff member, a consultant, or someone you know who works for a potential contractor – who is able to see through the physical and cultural barriers thrown up by countries and organizations. Ten people who know everything there is to know about outsourcing cannot replace one person with hands-on knowledge. The best way to see whether you have found the right person is as follows: “Can this person ensure friction-free communication flow within the web of stakeholders and team members?” In more than 80 percent of instances of process failure cases analyzed by DataArt necessary information was available in the group but was not available for the decision maker responsible for the failure.

There is no point in expecting that the initial quotation for a project given by the contractor will be the same as the project’s final cost – and even less point in expecting that no additional expenses will be incurred. It is rational to allocate a budget for project maintenance in advance: In other words, to name the person responsible for the work at the start, and come to an agreement with him or her on responsibilities, priorities, and budgets for additional resources. The advantages of outsourcing are that it is easier to regulate financial relations with the external contractor, and that you can effectively defend your interests and stop the budget becoming inflated. But in doing so it is important to take into account the risk that the natural and manageable conflict between the client’s and the contractor’s financial interests will be transferred to a project-internal context. It is important to consider all questions in terms of a project being run by a team made up of people from two or more companies, and not in terms of who is responsible for what.

### ***Focus***

While it is widely recognized Choosing Outsourcing over in-house development helps to preserve company’s business focus, but there is one more advantage which is frequently overlooked. The transition to outsourcing means that the CIO is forced to concentrate on managing the processes and information of business, drawing a line between core business and IT services that is visible, tangible and controllable. This is a very healthy transition for those companies which do not consider technology to be the primary driver of their competitive advantage.

### ***Cutting project length***

The ideal demands for realizing a software outsourcing project should be detailed, stable and verifiable. It is also desirable that the demands be complete and non-contradictory, although in reality it is possible to fulfill these two criteria only toward the completion of the project.

But even stable demands are not always possible, since administrative and competition means may change very rapidly. The speed with which the first few versions of a software solution are realized defines business success in most cases: In long projects, tiredness, and mutual complaints and problems accumulate and extinguish enthusiasm. The less time it takes to deliver the solution to the end user, the lower the risks. How short can this cycle be? Everyday practice suggests months, XP and other agile methods indicate weeks or days, while specially engineered solutions and processes can introduce substantial changes in a matter of hours. Given that time doesn't stand still for recompiling and testing even a few components, could only minutes be required? Fine-tuning technologies, visual management of information flow, and Web-based functionality publications make even this possible. The first to master these methods are offshore companies, for whom effectiveness is the only way of maximizing profitability in conditions of fierce price competition.

### ***Acquiring unique resources***

Purchasing services has one unique peculiarity: In paying for the services of even just one person, the purchaser gets the services of a whole company, and in some cases a whole industry. Well-organized companies have an infrastructure that disseminates knowledge of the availability of expertise. A standard company knowledge base is not always effective: For one thing, there is the Internet and the knowledge bases of large vendors; second, in order to get a useful answer, you have to be able to formulate a good question, and to do that you need to get to the answer in one step. It is quite another matter if a corporate infrastructure and culture help and foster requests for help. DataArt has the following organizational and technical solutions to this:

1. For every 10 to 15 employees, there is a senior manager who does not carry the whole weight of projects, and who independently makes decisions on assisting in a project should problems arise and, if it is unavoidable, organizes the an expanded assistance program.
2. A special and permanently supplied system that contains complete information on all employees' knowledge and abilities, including personal experience, hobbies and connections to outside sources of expertise.
3. A set of distribution lists through which any question can be asked directly. Sending a question to the company's general distribution list is allowed.
4. Colleagues have the right to make decisions independently on offering help to neighboring projects; if there are conflicts of priorities or resources, the problem is taken higher – if necessary to the company's top manager. As a result, the average time to solve problems is two to four hours. This is much more effective than employing a top-down system in which one or two days are usually necessary just to make a decision.

### ***Pitfalls to avoid***

1. Don't try to outsource problems. They won't go away by doing this, and the situation can become confused. Check whether the desire to outsource is a desire to escape

from your own mistakes and problems. You might get a lot more than you bargained for.

2. Don't try to outsource the routine and keep the creative side of a project for yourself. Too much of importance is hidden in the details, and realizing them always seems routine at the start. Diagnose and break down the psychological barriers hindering concretization of claims at the first sign of conflict. Don't hope that "professionals will sort it out somehow": They will sort it out, but you won't like it.
3. Don't part with your own personnel before time. One of DataArt's clients sacked all of their IT managers along with their developers after their first outsourcing success, and quickly ran into a lack of specialists and scarcity of on-site consulting.

## **Choosing a partner**

### ***Optimal price***

The contract-work development proposals market is so strongly diversified that it is possible to see prices from \$5 to \$500 per hour. Which price should you choose? A sensible figure is between  $\frac{1}{4}$  and  $\frac{1}{2}$  of your own price (for in-house organization). The price differential can be used with sufficient confidence to compensate risks, and the quality of the developers will be good enough for you to communicate with them.

When getting an estimate for a project, ask not just for an estimate of the financial cost, but also of the number of man-hours involved and other indicators. When holding a tender for outside expertise it is important to evaluate the adequacy of the amount of labor costs: Whereas prices can differ by 10 times and remain adequate, reasonable labor costs can not differ by a factor of more than 10 without special reasons (for example, the supplier having an analog of their own).

### ***Dialog***

The relationship with the supplier is established at the selection stage. The most important sign is the presence of a dialog in which both sides are able to listen to each other. If the client dominates the communication process and the contractor agrees, then the risks are great. If the sides put their own cases but don't listen to each other's replies, or if the contractor manages to dazzle the client with their intellect, then disaster is unavoidable. If a constructive dialog is set up that is dominated by attention to arguments and constructive elaboration of demands and priorities, then the foundations for a successful project have been laid. Communication should be accepted.

### ***The dowry***

As a marketing gimmick, contractors often announce the platforms, methods, and technologies that they have in one applied area or another. This can be either very useful or

very dangerous. The principal yardstick of usefulness is the presence of an analog or prototype.

An analog or prototype is a program that can be put in place and evaluated. Often, it is possible to get a long way in small steps, each of which improves the functionality of a product and raises its stability and productivity. In this way you can avoid dead project time when there is nothing to try, and this reduces the risks at least to normal.

A platform or method that the end user can not evaluate often conceals dangers. Like a Trojan Horse, it can contain – alongside useful functions – enemies, limitations, and superfluous difficulties that turn out to be fatal to the future of the project. It is not worth believing home-made platforms if you are not able to evaluate an analog thoroughly.

### ***Travel***

Visiting the subcontractor is essential. This gives you the possibility of seeing, which is much more effective than just theorizing and gives you a big advantage in increasing a team's commitment, emotional energy, and creativity. DataArt refused to work with clients in Russia because, although we were able to communicate personally, they played their cards too close to their chest, thereby lowering the quality of service for offshore clients. Large doses of medicine can be poison.

Visits by the subcontractor's employees to the client are very useful. It is impossible to underestimate their importance for establishing constructive and friendly relations. But don't overestimate the effectiveness of short "knowledge exchange sessions": These can take the form of integrating the visitors into the business process for three months, or nothing more than taking them to lunch to talk about current questions. Documenting demands should be done by those who understand the demands, and not those who understand the process of documentation. If a document is too close to something that the client could have drawn up, then it would be better for the client to draw up that document. If a document is far too "good", "complete" and "perfect", then it is likely that the client will find it hard to understand and ensure an adequate reply. Language is an important management tool, and it should not be given to a subcontractor. If you don't know UML, it is best to use English than to think that "such clever pictures can't be wrong".

### ***Partners' responsibilities***

Responsibilities should be combined, not split. The client manager who denounces problems with the project early in order not to lose face provokes problems. The contractor manager who laments "terrible" demands from the very start of a project demoralizes their team. To avoid a good half of the risks involved in carrying out a project, it is enough to stop zones of responsibility from being divided into "ours" and "yours" – and it is particularly important not to allow the creation of demarcated zones of responsibility of the client and the contractor.

# **Establishing a relationship**

## ***Aligning contexts***

There are only three ways to learn how to communicate with each other: Communicate, communicate, and communicate. It may seem stupid to state the obvious, but it is also possible to be a fool by not saying what is obvious to one party and not to the other. Teaching experience is very helpful for conveying a thought. It is not about beautiful wording or picturesque metaphors: Repetition, control questions and exercises make it possible to get a point across. The client should use this technique directly, but the contractor sometimes covertly, so as not to create the impression of being hard-headed or unmanageable.

## ***First projects***

The best first project is a hopeless one. It means that energy that the contractor would spend on winning the client's confidence can be used more effectively. And if successful, relations more often than not are formed in the best possible way.

A non-conceptual test project reduces the risks to core business, but does not allow a considered decision when it finishes. Comparatively necessary projects usually turn out comparatively successfully, and decisions about future projects usually depend on external circumstances.

## ***Effective communication***

Communication should be direct and uninhibited. Signs that communication is not organized properly are:

1. Information flow between the client and the contractor is all channeled through one person, or even worse, through a chain of successive managers. Whether obviously or not, a distribution list should be used that includes all active stakeholders in the project from the client side, and at least the project leader and quality-control manager from the contractor. Otherwise, the risks of information delay and loss can grow catastrophically.
2. Information should be passed from person to person without getting lost or distorted. Only sometimes is it worth using reinforcement, when a manager is asked to convey one message or another to everyone. Using reinforcement is unavoidable in all cases of information distortion.
3. A long argument involving many people takes place on the distribution list. Such arguments are ineffective and lead to time being lost. A meeting should be organized quickly, and all those involved in the argument invited. Ideally, the most satisfactory solution to the argument should be found: If not, the side that forced the solution takes responsibility, and the side that lost will at least be convinced that its arguments have been listened to and taken into account.

## **Acceptance**

A project should start to be accepted as early as possible – from the first milestone or even earlier. A self-centered position along the lines of “you do everything first and then we’ll look” is an exact reflection of “fools shouldn’t be shown half-finished work”. You have to be clever, and you have to learn how to evaluate and demand that the project be built so that each milestone brings the conclusion of the project nearer both visibly and measurable. In doing this you have to take into account that a correct project plan envisages a slowing-down at the end. For example, three milestones at one-month intervals should mark half, five sixths and the whole project, and not one third, two thirds, and three thirds.

## **Developing relations**

### ***Improving the process***

Balancing processes statistically is as unsteady as riding a bicycle. If you don’t look after development continuously, relations will lapse. It is essential to select metrics and strive to improve them. If the metrics are successful, then relations can have a bright future, but if not, then there is at least a chance of avoiding disgrace. If the metrics improve but people are still not happy, then it’s worth changing the metrics. Everything should be done to avoid suffering from not being able to establish metrics.

### ***Changing personnel – good or bad?***

When a contractor manager says that they want to change a swathe of project developers, it can either mean that the best of them are being taken by another project, or that he has managed to hook a new star. How to find out the truth? Communicate.

## **Concluding relations**

See acceptance. Relations, like life, culminate from the very beginning. And using outsourcing makes us responsible and independent. Every day you should ask yourself the question: What will happen if my partner’s business fails? If the project is very advantageous to the contractor, then it can survive even if the company fails. If the client squeezes everything they can out of the contractor, then in saving resources they make the success of the project dependent on the contractor having more generous clients.