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White Paper

Return on Investment (ROI)
The Cost vs. Value Equation for
Offshore Software and Technology Projects

Delivering the Value of Technology



ISO 9001:2008

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for
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Abstract

When you engage an offshore service provider, you must predict measurable results and achievements in order to justify the cost of acquiring the service. Ideally, the value of the service should exceed, or at the very least, be equal to, the monetary investment. If the value of a service or product is particularly unique, the organization may be willing to pay more for that service or product. This document includes some recommended value factors for your consideration. We have also included two approaches to analyze vendor value. One is a 'risk' assessment and the other is a 'weighted value' assessment. You may use one of these two methodologies to calculate the value of a vendor service offering versus the quoted cost or fee.

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Offshore Return on Investment (ROI) - The Offshore Cost vs. Value Equation

Most organizations find it difficult to assess the value of a product or service in proportion to the fee or price paid for that product or service. Yet, if your organization cannot perform an objective value vs. cost comparison, it is impractical to assume it can accurately measure its investments or determine whether those investments were productive.

Here, we will discuss the importance of the cost vs. value analysis and how to apply that analysis to offshore projects in order to determine the value of offshore services.

When you engage an offshore service provider, you must predict measurable results and achievements in order to justify the cost of acquiring the service. Ideally, the value of the service should exceed, or at the very least, be equal to, the monetary investment. If the value of a service or product is particularly unique, the organization may be willing to pay more for that service or product.

As an example, let's consider the investment you make when you buy a pair of shoe laces. It is not difficult to find a store that sells shoe laces at a reasonable price, in the color, length and style you want. If the shoe lace breaks, you do not have to invest a lot to replace it with another pair of shoe laces. The value to cost ratio for a shoe lace is easy to understand!

Now, let's consider the value to cost analysis for an offshore service provider. When you make a strategic decision to employ an offshore service provider for long-term support, or for a targeted short-term project, you must, of course, take the time to develop a list of requirements for the service. Those requirements will include the budget, the schedule, necessary skills and, experience, the scalability needs, the resources necessary to complete the tasks, and the requirements you have of the service provider in terms of project management and ongoing reporting and relationship management.

Your organization will also have to justify the investment by projecting the value of the service versus the investment to acquire the services. The management team will certainly want to know if there are other options that provide equal value at a lower cost.

But, the offshore cost vs. value analysis is not quite as simple as the cost vs. value analysis for that pair of shoe laces we discussed!

In the last decade, the outsourcing phenomenon has gained acceptance and grown in popularity. The reason for this growth is clear. Outsourcing enables an organization to focus on core competency and critical activities and to pass on other business activities to experts and professionals who specialize in specific processes, and business functions.

In the realm of offshore technology outsourcing, an organization might decide to outsource software development, programming services, project management, application, and infrastructure maintenance or any one of a number of other tasks.

However, the decision to outsource an activity does not mean that the organization defines that activity as 'unimportant.' The appropriate manipulation, maintenance and integrity of the data in your organization is critical to your success. It supports communication with clients, partners, employees and other stakeholders and it allows you to store and manage information to support your various business functions, e.g., sales, production, facilities management, human resources and other critical business functions. IT availability and performance is quite simply the lifeline of every business organization.

If an offshore service provider takes over responsibility for some or all of your technical support, design or development activities, you must be confident in their ability to provide timely, affordable, effective services that will support your tactical and strategic business objectives.

The cost vs. value analysis is undertaken as a means to clarify the value of the investment and ensure that the organization is spending its money wisely and getting an appropriate return.

If the cost vs. value calculation is to provide meaningful information, it must be objective and measurable. After your organization has circulated its Request for Proposal (RFP) or Request for Information (RFI), it must consider the proposals submitted by the various service providers and determine the inherent value of each proposal.

This white paper includes some recommended value factors for your consideration. We have also included two approaches to analyze vendor value. One is a 'risk' assessment and the other is a 'weighted value' assessment. You may use one of these two methodologies to calculate the value of a vendor service offering versus cost or fee quoted by the vendor.

Let's begin by identifying the components of service provider value. The list of components below will provide a starting point from which you can build your own metrics to perform your cost vs. value analysis.

Components of Service Provider Value

- **Stability, Flexibility and Experience**

When you consider the experience and skills of the prospective service provider, look at the stability of the company and the management team, as well as how long the company has been in business. These factors will provide some insight into the dependability of the service provider for long-term projects and goals.

Does the vendor have enough people on staff to provide the skills and knowledge to meet your technical and business needs?

Can you choose vendor team members to staff your project or will the team members be swapped out without your knowledge or input?

Can the vendor respond to required increase or decrease in staffing complements?

Is the vendor response timely and flexible to changing business conditions?

Make sure the service provider has a good plan in place to keep its team members trained with current skills, and to provide knowledge transfer on projects. If the team is staffed with members of varied backgrounds and experience, team members can share information, grow skills and ensure that tasks are completed appropriately and with balanced supervision.

What would be the negative impact if the service provider did not have adequate account management, project management or oversight?

- **Delivery Models**

While your project or support requirements may be focused on pure offshore delivery, you may want to give some thought to the delivery model options offered by each vendor. If your project is complex or long-term, it is likely you will need some other form of delivery during the course of the project. You may wish to add vendor team members in an onsite capacity at your location to act as a true extension of your IT team, and to participate more fully in team meetings and decisions.

You may also wish to structure your project in a hybrid or mixed delivery fashion so that you are working with some team members onsite, while other tasks are performed offshore by the extended team.

If the service provider only has one method of delivery, their processes, procedures and contracts will be structured accordingly and you will not have the flexibility to make changes, add staff or modify project requirements. What risk might that pose to your project? What value would a flexible delivery model structure add to your project now and in the future?

- **Proven Processes and Methodologies**

Is the vendor you are considering well versed in the risks and obstacles of the typical offshore outsourcing engagement? Have they developed proven processes, business models and methodologies to control, manage and complete projects with complete confidence and sustainability?

What kind of backup policies, risk management plans, attrition Issues, cultural Integration and skill orientation processes are in place to ensure success for every task and in every phase of the project?

What kind of quality standards and processes are used to execute tasks, test features and functionality and monitor systems, data transmission and data integrity?

Does the service provider have adequate standards for data security and privacy? Are these standards compliant with the requisite industry or government regulations you must obey?

Does the service provider have reporting and communication processes and policies to support your project and long-term goals?

What kind of project management, account management and team reporting is in place to document technical and business activities?

Will these processes and methodologies provide affordable, timely project completion, and long-term support to meet your technology requirement?

- **Client Satisfaction**

Review the vendor proposal, contact and interview references and look for client testimonials to determine the level of historical customer satisfaction for that vendor.

Does the vendor ask clients to complete periodic evaluations and are the results of these evaluations available for prospective client review?

Does the vendor have clients around the globe or are their clients localized to one area?

What kind of ranking does the vendor have in terms of client satisfaction for working with time zone variations and sustaining good communication and support?

What is the support schedule for offshore clients? Is the vendor available only on certain days of the week with limited common working hours during which a client can contact critical team members?

What is the risk if your team cannot contact or work with offshore team members with a timely response during the critical path of the project?

What is the value to your organization if you are working with a vendor who is available 6-7 days per week, 24 hours a day?

Are there linguistic or cultural barriers to overcome within the client and service provider teams?

- **Leveraged Offshore Costing**

When you are considering an offshore service provider, the geographic location of the development and support center is very important. The country, state, and city location will dictate the dependability of business infrastructure, and the stability of the local society, and politics.

If the business infrastructure is unreliable, your project may suffer the consequences of frequent downtime. You will also want to understand business and economic support provided by local government, the availability of a stable, skilled IT resource pool and the cost of doing business in the area. If the local government is not conducive to stable business operation or if tax considerations and economic issues impact the local businesses, your project costs may be higher, or services may be spotty or undependable.

You should also consider the cost differential passed on to you by a service provider where their cost of doing business in a particular area is higher than average because of overhead or other factors.

If the cost to run a facility and to staff projects is higher in the business location, your service provider will pass on that cost to you. If resources are short, the cost of these resources will be at a premium and your project or support costs will increase.

Too much competition in an IT market with limited resources can result in high attrition rates as competitors vie for valuable resources with tempting perks and benefits and salary. Ask your service provider about team and staff turnover and resource retention strategies.

- **Contractual Flexibility and Standards**

What kind of pricing options and contract structural options are available? Does the vendor have fixed price, and time and material options? Are there hourly fee options for small, short-term requirements?

Do you have a copy of the standard contract language used by the vendor? Will the vendor work with your legal or contract team to quickly and efficiently address contract language issues and move the project along so that it can be started in a timely fashion?

Does the contract contain delivery guarantees for schedule and fee limitations if appropriate? Is the language clear as to change orders, renewal and termination?

Does the vendor work with you to develop service level agreements (SLA) to define the level of service, downtime and other critical factors of delivery?

These are some of the considerations for vendor value. You may have others you wish to add. Each will have a specific value to you, depending on the type of project you are considering, and the type and length of the relationship with the prospective vendor.

If you are planning on a long-term relationship, the reliability and consistency of your vendor services will be of utmost importance. If the project you are considering is strategic in nature, or if it has high visibility, you will want to assure the value of the services before you make an investment.

Putting it Together

There are many ways to consider value. Here we provide two approaches to the question of value vs. cost. The first method we will consider is Risk Calculation. The second method is a method of Weighted Value.

Risk Calculation

To calculate the value of the total investment, you must associate a level of risk for each project component for every vendor you are considering.

Here are some examples of project issues that might result in risk, if a vendor is undependable, unstable, or if the vendor has limited skills or limited services.

1. **Abandoned Project** - In the event a service provider goes out of business and you must start over with another service provider, the cost of your project might double or triple! When you consider this example, the measurable value of a stable service provider is quite clear!
2. **Infrastructure Failure** - If a project slips because your service provider infrastructure is down, or if the resource pool is limited and you have to wait for a team member to be assigned to your project, you will experience a delay.
3. **IP and Data Security Risk** - If the vendor does not have adequate protection for data or multi-layered privacy and data protection processes, your project and organization may be at risk.
4. **Re-Work** - If the service provider must engage in re-work to correct tasks that were incomplete or poorly executed because of lack of adequate process, skill or experience, you will lose days on the project.
5. **Review Processes** - If a particular task must be reviewed by a manager and that manager is not available to complete the review, you will lose days.
6. **Subcontractor Management** - If your service provider must bring in a partner or an industry consultant to assist with a particular task, the project cost will increase and the project may be delayed while the service provider waits for additional resources.

If your project requires specialized skills, you will need to consider the risk of engaging a vendor who has no experience in managing subcontractors or partners or experience acting in a management role.

A vendor with experience working with and managing partners, or other subcontractors, will have a defined process flow, and will provide important coordination for projects. If a vendor can effectively manage the multi-vendor process, your team will be free focus on other business matters.

There are numerous other factors you might consider for your own project. Once you have developed a list of project components and prioritized them to determine which are the most important, you will want to analyze each vendor proposal to determine the level of risk for each component.

Does Vendor 3 seem to present more of a risk in terms of IP and Data Security? If so, your percentage of risk calculation will be higher for that vendor and the estimated value of the services they provide will be lower.

This method requires the organization to review the various components of project value and assess the vendors against these components, assigning a level of perceived risk of failure.

To ensure that your risk analysis is accurate and that your organization is approaching vendor assessment in an objective manner you will want to structure your assessment in the following way:

- ✓ Involve a variety of stakeholders in the review of proposals and in the vendor interview process, e.g., management, IT staff, partners and others as deemed appropriate.
- ✓ Provide each stakeholder with a standardized assessment tool that assigns a value to each of the project components you choose to assess. Whether you use the list we provided above or a list you develop on your own, you must agree on a priority or value for each of the components.
- ✓ Provide each stakeholder with a list of risk factors you want them to consider in their analysis. This will ensure that the risk analysis is uniform from one stakeholder to another.

Here is an example of one such factor listing, including the analysis of an individual stakeholder who completed the proposal review and participated in the vendor interview.

Content Management System (CMS) Project – ABC Company

a. Project Component: Re-Work (Risk ranking 1-5 with 5 being the highest risk)

i. Factors of Risk – Vendor 1

1. Did the vendor effectively answer questions about process, project management and task sign-off?

Yes (ranking 0%)

Explain Ranking (if necessary) _____

2. Did the vendor provide adequate detail or copies of process diagrams to verify or validate their quality processes or review processes?

Yes (ranking 1%)

Explain Ranking (if necessary) _____

3. Can this vendor perform the tasks defined in the RFP with limited re-work?

Yes (ranking 1%)

Explain Ranking (if necessary) _____

There are many ways to compile and analyze your risk calculation. In this paper, we have assessed vendor risk by assigning a perceived risk assessment for each vendor across all of the six components we defined for consideration above.

Here we illustrate the calculated value of three sample vendors using this risk calculation. The final calculation is derived from the individual stakeholder assessment of risk across all six components.

Project Cost (fixed price) = \$125,000

Vendor Risk Assessment = 5% - 100% in increments of 5

Project Component	Vendor 1 Risk	Vendor 2 Risk	Vendor 3 Risk
Abandoned Project	0	0	5
Infrastructure Failure	1	3	3
IP and Data Security Risk	1	2	1
Re-Work	1	4	4
Approval Loop or Review Processes	1	1	2
Subcontractors Management	1	5	5
Total Risk	5%	15%	20%

As you can see, the value of the investment decreases as the risk increases. It is unlikely that any vendor would be ranked as a 0% risk. But, in the event you applied a 0% estimated risk ranking, the project would be fully valued at \$125,000 - because that vendor would deliver full value for the investment.

Vendor	Risk	Project Cost	Project Value
Vendor 1	5%	\$125,000	\$118,750
Vendor 2	15%	\$125,000	\$106,250
Vendor 3	20%	\$125,000	\$100,000

Using a risk ranking process to assess prospective vendors can provide a detailed measurable analysis which your organization can use at a later date during its project post mortem process. By evaluating the final results of the project and comparing the results to the risk projections, you can further refine and correct any incorrect assumptions you may have made in your risk analysis.

Weighted Value Calculation

If you want to use a simplified approach to calculate your cost vs. value metric, you can consider the second approach to calculating vendor value. Here we consider the concept of 'value add'. First, you will look at each of the components in the calculation and review the proposal and interview notes for the service provider you are considering.

Assign a weighted value and a value add factor (0-5) to each of the components based on the importance of the individual component and the estimated value added by an individual vendor. For example, if Vendor 1 has only been in business for one year and has only one person who is skilled at Java, you might assign a value add of '1' or even '0' for the 'Stability, Experience and Skills' component to reflect the risk of failure.

The weighted value calculation is based on the importance or criticality of a particular component. In other words, if that component were at risk, the impact to the project might be more severe as compared to the failure of one of the other components.

For particularly difficult or important components, you may want to take the time to look at the cost of delays and calculate an estimate for the actual lost dollars if a project is delayed by a week during the critical path. That will give you a better idea of the criticality of a component and allow you to verify that the importance you have placed on that component is appropriate.

Each organization may have a different idea of the weighted importance of a particular value component. Feel free to change these component weights to accommodate the unique aspects of your project and your requirements.

There are a number of ways to calculate a weighted value. In the example below, we have used the percentage system, with a value add factor ranking of 0-5, with 5 being the highest ranking for value. In this example, the higher the number in the calculation, the higher the value of services is for that component and for all components when calculated overall.

Vendor 1			
Component	Value Add	Weighted Value	Value Calculation
Leveraged Offshore Costing	3	18%	.54
Stability, Experience and Skills	4	22%	.88
Delivery Models	3	15%	.45
Proven Processes and Procedures	3	20%	.60
Client Satisfaction	3	15%	.45
Contractual Flexibility and Standards	3	10%	.30
Totals	19	100%	3.22

Vendor 2			
Component	Value Add	Weighted Value	Value Calculation
Leveraged Offshore Costing	1	18%	.18
Stability, Experience and Skills	1	22%	.22
Delivery Models	2	15%	.30
Proven Processes and Procedures	1	20%	.20
Client Satisfaction	2	15%	.30
Contractual Flexibility and Standards	2	10%	.20
Totals	9	100%	1.40

Let's take a look at the final cost vs. value analysis for the two vendors considered for this project.

Vendor 1	Proposed Project Cost	=	\$155,000	x	3.22	=	\$499,100
Vendor 2	Proposed Project Cost	=	\$148,000	x	1.40	=	\$207,200

As you can see, although the bid from Vendor 2 was less than the bid from Vendor 1, the value of the services is much higher for Vendor 1, making this the better choice. Of course, your 'value add' metrics must be objective in order to make this exercise worthwhile.

We suggest you ask several team members to rank an individual vendor in order to get a perspective from more than one person. If you average the final calculation based on rankings from all team members, you may use that number to calculate the final value.

Remember that you must perform the cost vs. value calculation on each of the vendor proposals you receive in order to develop comparable numbers.

Summary

If you take the time to break down the complexities of the cost vs. value calculation, and to consider the service value components individually, you can assign dollar values, risk factors, value add factors and methods of risk or weighted measure to develop an objective picture of the value of an offshore vendor service offerings and thereby ensure that you choose the appropriate vendor for your project or long-term support needs.



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