

Performance Coefficients

A Method for Objectively Measuring Outsourcing Vendor Performance

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Objectively Measuring Outsourcing Vendor Performance

Overview

Is your organization able to compare the relative effectiveness of its sourcing options? When all costs and impacts are considered, how does your offshore outsourcer compare with your internal IT teams? Can you accurately rank your sourcing vendors by performance?

An effective method for rating vendor performance has been the holy grail for IT executives for years. In our current era of increasing fiscal austerity, this search is becoming increasingly important as senior executives seek ways to reduce costs while allowing critical projects to continue. Knowing which options are more effective for which projects, and by how much, enables decision makers to better direct the resources and budget dollars at their disposal. Better yet, an objective comparison of options provides considerable negotiating leverage and allows executives to perform “what if” analyses on the advantages (or disadvantages) of moving a project from one source to another.

This article examines the limitations of current vendor assessment methods and proposes an alternate model, **performance coefficients**, as a potential solution to the questions posed above. It describes how these coefficients are captured and calculated, as well as their benefits and advantages for IT executives.

The Limitations of Current Comparison Methods

Too often, comparisons of sourcing options tend to focus on a single parameter – cost. The large differential between onshore salaries and offshore wages entices many senior executives and has driven companies to shift work to India, China and other lower cost locations. In many situations, vendors are chosen for either low hourly rates for time and materials (T&M) engagements or for being a low bidder for a fixed price project. Other considerations also apply, but companies focus mainly on costs as they are objective and easy to measure. Yet, cost provides only a partial picture of a vendor’s effectiveness. For example, Vendor A may charge half the rates for a team of programmers on a T&M engagement than Vendor B, but if those programmers are only one third as productive as those from Vendor B, they are the more expensive option in the long run. This distinction is somewhat obscured on a fixed price project, but remains as relevant. If the low cost vendor completes the project successfully to the bid price, was the project a good deal? Not if the bid price was significantly inflated (albeit still less than the competitors’) over the actual costs.

Scorecards are another popular method used to assess differences between vendors. This method rates each vendor’s performance on a set of factors that may include quality of delivery, customer satisfaction, account management responsiveness, as well as financial performance. These factors are usually weighted to provide an overall “balanced” score that can be used to compare vendors. Scorecards have the advantage of providing a much more nuanced view of vendor performance and they highlight areas that need improvement. On the negative side, scorecards don’t provide a dollar value for differences in ratings. If a scorecard rates vendors on a 0 through 100 scale, and Vendor A rates an 85 and Vendor B rates 92, is Vendor B always the better choice? If Vendor A’s rates are 20% lower, is this sufficient to compensate for the difference in rating? Further, few organizations use the same scorecard system to assess the performance of internal IT teams to get an “equals to equals” comparison of sourcing options.

The Performance Coefficient Concept

One approach to overcoming the limitations of current comparison methods is use of performance coefficients. This coefficient is a ratio of a given sourcing option’s productivity against a baseline. The baseline is set against a historical standard, such as the historical productivity of the internal IT organization.

The advantage of performance coefficients is their ability to provide a relative measure of sourcing effectiveness that ties directly to financial effectiveness and can be used for estimation and “what if” scenario planning. If designed and implemented correctly, they are useful for any level of engagement, from a single contractor to roll-ups across IT project portfolios.

In its simplest form, a performance coefficient is calculated by:

- Sizing a set of projects performed using different sourcing options (vendors)
- Capturing the fully burdened cost of each project
- Dividing cost by units to get productivity
- Setting a ratio of the comparative productivity divided by the baseline option

These calculations are illustrated in the table below. Vendor A produced 11,000 units of work for a cost of \$15,000, resulting in productivity of \$1.36 per unit. Dividing that productivity by the internal baseline of \$1.60 gives Vendor A a performance coefficient of .85. In other words, Vendor A can perform the same project for 85% of the cost of the baseline. This coefficient clearly highlights the relative effectiveness of the different options.

	Internal Baseline	Vendor A	Vendor B	Vendor C
Units of Work	10,000	11,000	18,000	6,000
Cost	\$16,000	\$15,000	\$19,000	\$11,500
Productivity	\$1.60	\$1.36	\$1.06	\$1.92
Performance Coefficient	1.00	0.85	0.66	1.20

Assuming the vendors offer the same types of services, one can easily estimate and compare the cost advantages (or disadvantages) of contracting a project to a given vendor. For example, using Vendor B should result in a 33% cost savings over internal resources, while using Vendor C would cost 20% more.

What About Quality and Other Relationship Aspects?

At first glance, performance coefficients appear useful for cost purposes, but seem to miss important concepts such as the quality of the delivered work products, responsiveness to requests and adherence to delivery schedules. The example above is intentionally oversimplified for illustration purposes, however, in practice, most needs can be accommodated by carefully defining and collecting the information used in the calculations.

- **Cost**

A key to the success of the performance coefficient concept is the capture of the real costs of a project rather than simply relying on hourly rates or contract bid price. For example, the costs of internal project oversight, as well as managing the vendor relationship must be added to the project costs. A vendor that is difficult to work with, or one that requires significant handholding, will incur additional costs that would directly impact their performance coefficient. Likewise, all ancillary expenses such as training costs, internal reviews of work products, and additional testing must all be included. A vendor may have the lowest rate structure, but their effective costs may be significantly higher as they require longer ramp up times and greater internal support to be effective.

- **Quality**

For the purposes of performance coefficients, quality is defined as conformance to specifications. Specifications are project specific, and can encompass quality criteria such as containing requested functionality, meeting set coding and performance standards, and achieving set defect levels. A work product that meets its quality requirements is deemed **Accepted**. When calculating productivity, **only accepted work products are counted**. If a given work product doesn't meet quality standards, it is rejected and requires additional work (**rework**) to bring it up to specifications. Whether this work is performed by the vendor or other resources, it reduces throughput by requiring additional delivery time and adds costs. Thus, poor quality directly reduces a vendor's productivity, resulting in a higher performance coefficient.

- **Work Units**

Although the concept of a work unit is simple, the challenge is defining a unit of work that can be easily and objectively measured across a variety of projects. The 80/20 rule applies to work unit definition; a relatively simple work unit measurement, while not accurate in every situation, can still be "good enough" for most purposes. The ideal work unit is easily measured/counted and can be tied to clear acceptance criteria. For IT projects, possible unit measurements include lines of code (LOC), modules, trouble tickets, and change requests. Although each of these units has drawbacks, they are easily collected and can be normalized into a standard measure for assessing productivity.

- **Throughput**

Throughput is the volume of work that can be completed within a given timeframe. It is a function of capacity (i.e. team size) and productivity. Most IT products have a defined delivery schedule that must be met. A given vendor may be highly productive and deliver excellent quality, but lack the capacity to deliver an effort within the desired timeframe. Conversely, a vendor with lower productivity may need to add resource capacity (and associated costs) to meet schedule commitments. The impact of throughput is not shown in the simple table above, but must be included when developing a real life performance coefficient calculation, either by establishing a cost value for missing schedule commitments or calculating a separate adjustment to the productivity number.

Performance Coefficients in Practice

Performance coefficients are a powerful senior executive tool for translating the attributes rated in vendor scorecards to real differences in delivery value. They permit objective assessments of sourcing options by the end result – the true cost of accepted work products. This focus enables executives to weigh tradeoffs in vendor pricing and support requirements. For example, the lowest price vendor may have the highest delivery defect rate and need more support from internal resources than another vendor, yet still remain the best value even after the other costs are included. Conversely, the additional costs and efforts may push that vendor out of contention when compared with other options. Or senior, experienced programmers may have a significantly higher hourly rate, but when productivity, throughput and decreased support requirements are included, they may be the most cost effective option.

Performance coefficients can be used for both operational and strategic assessments of vendor performance. Example uses include:

- **Vendor Monitoring**

Current vendor performance is easily evaluated against past performance to identify improvements or drop offs. Depending on the implementation method, performance coefficients could also be collected periodically throughout a project to ensure it remains on track and that performance meets expectations.

- **Project Estimation**

Multiplying the productivity component of the coefficient against the expected size of a project provides a good “check and balance” with other estimation methods. When faced with proposals from multiple vendors, performance coefficients provide an objective way to evaluate whether the estimates appear accurate given past vendor performance.

- **Negotiating Leverage**

Vendor A may have a higher performance coefficient, but be willing to take measures, such as cutting rates or providing additional deliverables, to match Vendor B’s performance.

- **Portfolio Management**

Performance coefficients can be used to estimate the expected benefit from moving a project from one vendor to another. Rolling up productivity across multiple projects in an IT portfolio could give executives a view of their organization's overall effectiveness. In times of tight budgets, it enables executives to assess how much saving is possible through more effective delivery and how much must be sought by cutting projects.

In Conclusion

Performance coefficients may not be the full "holy grail" that the IT industry is seeking, however, they can be implemented with reasonable effort and provide a straightforward and objective method of comparing vendor performance. Organizations have considerable latitude in how they define, implement and automate a performance coefficient measurement program, enabling them to use existing information sources where possible and adjust for organization-specific factors.

This brief article can only touch the high points of defining an effective program, and as always, the details are important. Organizations can experiment by building their own assessment models and testing their calculations on historical projects. Seeking assistance in planning and executing a vendor assessment effort can speed implementation and avoid common pitfalls.

About the Author

Ian S. Hayes is founder and president of Clarity Consulting, Inc. An industry analyst and management consultant, he actively advises Fortune 1000 companies on enhancing IT value by better targeting IT investments, improving the effectiveness of IT execution, optimizing the sourcing of IT activities and establishing measurement programs that tie IT performance to business value delivered. Author of three IT books, he has chaired numerous industry conferences, produced research reports for The Advisory Council, Cutter Consortium and Triaxsys Research, and his articles have appeared in publications such as Business Week, Computerworld, Optimize, Information Week and the Cutter IT Journal.

About Clarity Consulting

Clarity Consulting is a Beverly, Massachusetts based management consulting firm specializing in Information Technology (IT) strategies, emerging trends, markets and challenges. Relying on superior situation analysis, solution formulation and communication skills, Clarity Consulting helps our clients devise creative solutions to complex issues and capitalize on the opportunities presented by technology. Our international client base includes corporate IT organizations, professional services firms, product vendors and legal and financial services firms. Clarity Consulting was founded in 1993.

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