CATALYTE

FOUR HIDDEN COSTS OF OFFSHORING

How offshoring software development hinders innovation, exacerbates communication issues, lengthens ramp-up time and precludes the creation of future in-house technology leaders



OFFSHORE DEVELOPMENT DOESN'T WORK

For decades, U.S. companies have shipped IT work offshore to cut costs. The practice began with simple and highly predictable help desk type services.

Offshoring then spread to services like software development as companies discovered lower labor costs in countries like India, China and Ukraine.

But, in a consumer-driven technology environment, offshore software development doesn't work. The rapid iteration, innovation, communication and specialized knowledge needed to quickly produce quality products isn't suited for offshoring.

In this high-pressure and unforgiving environment, companies are frustrated with offshore software development solutions for all but the most mundane and repetitive tasks. They've discovered that the hidden costs of offshoring outweigh the benefits.

Catalyte delivers 100% onshore resources at the project, team and individual level.

Hire the right talent

Four hidden costs

Companies that have evaluated or used offshore software development have discovered four important hidden costs that can negate the anticipated gains of paying lower hourly development rates.

Communication barriers inhibit innovation and collaboration

Software development suffers when teams can't communicate clearly. These communication gaps inhibit agile development approaches that are crucial to creating innovative products. This is because agile relies on rapid real-time collaboration, development of trust and shared understanding between developers and line-of-business project owners.

Significant time zone differences create communication lags and decrease productivity. The inability to communicate clearly and in real time is a major barrier to developing the teamwork and trust critical for effective execution. Because technology is at the heart of how well a company performs, development teams need to participate in and contribute to the business conversation.

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Modern applications generate large amounts of data. The ability to effectively manage and analyze big data yields valuable business insights. However, companies can only harness the power of big data if the teams building the systems to manage it can participate in the conversation about how it will be used and what it can do. When teams are separated by great geographic and cultural distances, those critical conversations can't happen.

Offshore development providers often don't fully comprehend project objectives. They can read the

requirements, but they are rarely customers of what they develop. This inhibits their full participation in the project and product strategy. More fundamentally, it means offshore providers frequently don't understand what is left unsaid: the context of, or an error in a requirement or user story.

The absence of iterative interaction between offshore development teams and business stakeholders exacerbates the issue of context. Without deep knowledge of project and business value, along with changing business requirements, offshore developers are unable to provide insight and recommendations critical to improving enduser experience. As a result, product architecture, design and functionality suffer. Offshore development, therefore, misses opportunities for collaboration that could lead to improved outcomes.

Offshore teams take longer to ramp up

As projects unfold, organizations should expect a ramp-up period which incurs significant costs. These costs include project scoping, requirements setting, onboarding of team members and knowledge transfer. When considering offshore teams and the need to distribute systems or processes across borders, these costs can rise dramatically.

The perception of low-cost labor in core offshore countries is misleading. In fact, offshore software development costs are rising at an alarming rate. According to NASSCOM (India's leading software and IT trade association), two-thirds of offshore providers are actively seeking a price increase for existing projects. In fact, 90% of Indian offshore

software development providers are asking for a higher rate, with an average increase of 10.6%.

The attrition rates of offshore providers can significantly impact ramp-up costs. If you face an attrition rate of over 20% every quarter, you are paying to constantly retrain new developers for the same project, while also losing valuable knowledge at a high rate.

Also, consider differences in productivity levels between offshore and onshore teams. Real-time communication and collaboration enhances productivity. Without it, offshore providers consistently require significantly more resources and hours to complete a project.

This pain is often felt during the requirements gathering and documentation phases of a project. While there is always back-and-forth during these stages, the inability to collaborate in real time can cause miscommunication. Without clarity in the requirements, teams can quickly develop down the wrong path. This leads to backtracking and wasted money, time and energy, which could have been avoided with a simple conversation.

Rework of low-quality offshore software development

Another major hidden cost of software development offshoring is repeating a project onshore, or reworking elements of projects that were developed incorrectly. These setbacks can have disastrous consequences for project deadlines, budgets and staff morale.

According to the International Journal of Software Engineering and Applications, rework consumes 40-70% of a software development project's budget.¹

Some rework costs can be mitigated through effective



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and organized development processes. For example, requirements gathering and agreement on requirements prior to each sprint reduces the rework required when stakeholders change requirements during project development or, worse, after a project is completed. But, the ability to collaborate and foster a team environment to come to agreement on per-sprint requirements is compromised with offshore teams.

In addition, when problems arise from offshore development, they require additional managerial and quality control efforts that burn through valuable employee time. This is rarely budgeted or accounted for in project timelines. These efforts can represent significant lost opportunity cost in terms of other work the employee was slated to do.

If employees are required to meet original deadlines while spending unanticipated hours troubleshooting, they may have to work late or on weekends to do so. This creates morale issues and is likely to create a negative attitude toward the offshore development team, further hindering productivity and collaboration.

¹ Ramdoo, Vimla Devi and Huzooree, Geshwaree. "Strategies To Reduce Rework In Software Development On An Organisation In Mauritius." International Journal of Software Engineering & Applications (IJSEA), Vol.6, No.5 (September 2015): 9-10.

Onshoring delivers measurable improvement

When a Fortune 500 sports apparel company wanted to create a critical new product that would solidify its dominant position in the market and its relationship with its customers, the company initially offshored the development of the new digital technology and associated mobile and desktop applications.

As the project progressed with a tier-one offshore provider, several issues surfaced:

- Project backlogs increased and existing resources became overloaded, which led to less productivity from development teams and missed project deadlines.
- Offshore developers struggled to understand business objectives and the desired product user experience.
- Team morale suffered as onsite teams from overseas had difficulty developing effective relationships with client team members.

In the end, a culture gap created a tangible effect on the ability of the teams to align and function as a cohesive unit with a common goal. This gap magnified each challenge that emerged.



After several months of struggling to make progress, the company concluded that launch dates and product success were compromised. It turned to Catalyte because of its reputation for providing high-quality services onshore and on time. Within three business days, Catalyte had a development team on site, working to get the project back on schedule.

Catalyte was able to fit into the company's culture from day one and contribute to the project from the first sprint. The team delivered the first version of the product 60 days later, helping the company take its first step towards leadership in the wearable tech market. When this Fortune 500 company compared the results of the project work performed by its offshore partner versus that done by Catalyte, it discovered:

- + Catalyte executed at one-third of the cost per agile story point.
- + Catalyte was significantly more productive, delivering 77% more cards per month and repeatedly meeting project deadlines.
- + The Catalyte team delivered with 55% fewer defects.

Based on the onshore development work of Catalyte, the Fortune 500 company viewed this initiative as, "One of the leading projects that has put technology at the forefront of the organization and its strategy."

Contact us to see how you can benefit from a 100% onshore development workforce.

4.

Offshore developers don't become future company leaders

What onshore developers offer, that offshoring can't and won't ever be able to, is the ability to retain knowledge and expertise within your company. With offshoring, you are utilizing a pool of developers halfway around the world. They may be able to solve your needs temporarily, but they aren't going to reinvest that knowledge and expertise in your business. They aren't your future leaders.

With onshore developers and teams, you build an innovation community that you can reinvest into future projects. Having talented, creative and forward-thinking developers located in and around your company allows you to build better products now. Converting onshore developers and having them grow into your future technology leaders ensures long-term innovation and market competitiveness.

The downstream effect

Jack Bogle, founder of The Vanguard Group, coined the term "the tyranny of compounding costs." While Bogle was referring to investor's costs and returns, the tyranny is also evident in the hidden costs just described.

There is an intertwined and cumulative effect of these hidden costs that businesses feel over time. Comparing the cost of offshore development teams, even with the misperception of low wages, to onshore teams is not as simple as apples-to-apples.

- Offshoring may have lower hourly labor costs, but when it takes an offshore team four times as long to deliver, you end up spending just as much, with additional headaches along the way.
- Offshore teams require additional management oversight. That team management function (whether located onshore or offshore) requires real-time, frequent communication about requirements, quality and velocity. The ability to deliver that feedback

- effectively in an offshore model is compromised by myriad factors, and the additional overhead cost of this oversight, regardless of its effectiveness, must be factored into any cost comparison.
- + Communication gaps created by distance produce a knowledge gap. When knowledge is transferred, it is often a result of efforts from non-business stakeholders, starting a dangerous game of "telephone," where the message delivered may not be complete or accurate. This lack of discussion and clarity creates an environment where backtracking and wasted effort are the norm.
- + A direct relationship exists between these hidden costs and project complexity. As the number of offshore resources required to complete a project and turnover rates increase, so too does project complexity. This complexity taxes testing resources and creates challenges down the road for product maintenance or enhancement, resulting in higher product support costs and barriers to new feature development.
- By offshoring work, you bear the cost of building a workforce in a location where it can't help you in the future. These same teams could be created with onshore developers, helping to fuel innovation and competitiveness for years to come.

The compounding effect of the hidden costs of offshoring can have lasting impacts on a business. Productivity, quality and cost risks threaten to offset gains expected from innovative applications that drive revenue, competitive differentiation and customer loyalty. These hidden costs must factor prominently into any software development outsourcing decision.

Ready to lower costs and increase the quality of your development efforts? We can create a custom talent solution. The right size. The right expertise.

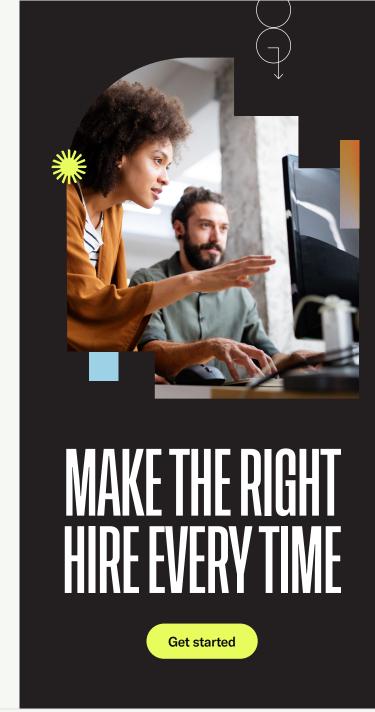
The right knowledge. **Right now.**

Get started

² Bogle: High Investment Costs Destroy Magic of Compounding Returns," by Janet Novack, Forbes, June 24, 2013.

ABOUT CATALYTE

Catalyte has redefined hiring. Its proprietary AI uses 500+ data points to unbiasedly discover and develop high-potential talent. By elevating aptitude over pedigree, Catalyte deploys a workforce that looks like America and that helps its clients boost productivity, quality and diversity metrics. By giving high-grit, high-aptitude talent the opportunity to launch new careers, Catalyte transforms individuals, companies and communities. For more information, visit www.catalyte.io.



CATALYTE'S ON-DEMAND TECH TALENT

500+

Tech resources

100% vetted tech talent ready to deploy when you need it.

100%

Onshore

Best onshore resource pool available to fill your needs fast.

20+

Year history

Trusted resource for forward thinking companies.