

OPD **OUTSOURCED PRODUCT DEVELOPMENT IN INDIA**

What some are calling "the next big thing" is business as usual for high-end outsourcing firm like Nagarro

Vikas Sehgal, CEO of Nagarro Inc., is poring over drafts of an outsourcing contract with a large US software products company. Nothing unusual in that, except that the customer itself employs hundreds of engineers in India. "We're starting to see this incredible trend outsourcing by companies that have their own Indian development centers," states Sehgal. "Senior managers at these companies tell us that they often get better work, more dedication and better prices by outsourcing to companies like Nagarro rather than by trying to work through the politics of their own India organizations."

Since Sehgal co-founded Nagarro in 1996, he has had a ringside view of the rapid growth of the Indian software industry. With about 400 people, Nagarro is certainly dwarfed by giants like TCS, Infosys and Wipro. However, by focusing on quality rather than quantity the company's T shirts carry a quantum mechanics equation and proclaim "Complex is cool" Nagarro has carved a niche for itself in the Outsourced Product Development (OPD) space. Today nearly 60% of its new business comes from Independent Software Vendors (ISVs). Some ISVs have been working with Nagarro for more than 10 years. "One of the first clients we landed in Europe was a mid-size accounting software company," Sehgal says. "That was in 1999. That customer has stayed with us despite trying out a few East European vendors over the years, and has steadily grown the engagement to cover three of their cover software products."

OPD: The lure

The general attraction of outsourced offshoring for ISVs is the same as that for other companies, namely "more bang for the buck". However, unlike non-software companies which typically focus on the "buck" part, ISVs are typically focused on the "bang". For the CTO, VP of Engineering or product visionary in an ISV, OPD may be a way of bringing to market valuable product features that would otherwise remain relegated to wish lists.

An additional appeal for ISVs is that the outsourcing partner can later be leveraged to take on services work such as product customization, integration and configuration. While this may appear as an easy revenue stream, a small or mid-size ISV often finds that it distracts from the core competency of building software products. Also, executives at ISVs are aware that the valuation multiples on revenues or profits for their company are often directly related to whether it is perceived as a "products company" or a "services company".

OPD: A different type of vendor

ISVs have realized that product development (as opposed to custom applications development or maintenance) requires a different kind of outsourcing vendor. Building a product with globally distributed teams requires clearer and more intense communication, more agility, and a higher engineering capability. Perhaps more importantly, it requires the willingness to genuinely partner over the long term to deliver products to the market that are robust, easy to use and easy to maintain and update.

In the 1990s, the large companies like Infosys, Wipro and TCS that grew to dominate India's IT landscape got their breaks in software maintenance projects. Since then, they have flourished mainly in the custom applications and systems integration areas. These companies have not had the success or growth in outsourced product development that they have had in other areas. While companies like Nagarro have consistently been succeeding with OPD for more than a decade, a brand new Infosys whitepaper on the company's website heralds OPD as "The Inevitable Next Stage"!

One possible reason for the comparative lack of success of the large Indian IT majors in OPD might be that they are organized to sell and work on big ticket projects, and most large ISVs that could be potential customers already have "captive" Indian engineering centers of their own. But the success of companies like Aditi, Persistent and Nagarro with large ISV customers shows that the real reason may lie elsewhere.

"Non-product offshoring is typically a throw-it-over-the-wall type activity," says Sanjay Sharma, a senior development manager in Gurgaon who has worked in many companies over a 20-year career. "A lot of time is spent getting the functional specifications just right and then the work is shipped offshore. Releases are few and far between. There is less emphasis on the way the solution is actually architected and sometimes even on the quality of code. By contrast, in an OPD environment, there is much more attention paid to the way the functional specs are translated into the engineering. Many ISVs use XP or Agile development. We don't work with business users on the other side; we work with highly skilled technical people. It's not possible to pass off inexperienced resources as capable or poor code as good code. It is a very different and challenging way of working."

But it is also more rewarding in terms of the experience gained. Studies show that engineers routinely prefer to work on OPD projects. Apart from the chance to work with experienced and often passionate software architects and developers in US and Europe, there is also the sense of ownership in being associated with a software product. "It's great to do offshore work for Merck or Pfizer," says a young developer, "but it would be so much nicer to do offshore work for SAP. After all, software is only a part of Pfizer's business. SAP is all about software."

OPD fears and challenges

The ISVs that have not yet adopted OPD usually say they haven't done so for reasons involving intellectual property (IP). Many ISVs have specialized domain knowledge or technological IP that they seek to protect from competitors. However, mature OPD vendors use a strict system of IP checks and balances to ensure that concepts, documentation and code do not fall into the wrong hands. Standard OPD contracts also include careful non-disclosure and other IP protection terms.





ISVs may also fear that the OPD vendor may itself become a competitor over time. In a bid to counter this, ISVs should almost paradoxically consider choosing vendors that are not too specialized in their target industries. Non-compete contracts are also often requested though not always successfully because they may sometimes be seen as too restrictive. In any event, there have been no major publicized cases of IP leakage as have from time to time occurred within the Asian outsourced manufacturing industry or Business Process Outsourcing (BPO) industry.

When the outsourcing decision is being made by a mid-level manager rather than a top executive, there is also often the fear of being made redundant. In practice though, it is easier to replace engineering employees in a non-product environment than in an ISV. US- or Europe-based engineering employees in ISVs typically bring specialized technology skills, domain understanding and product vision that can be augmented but seldom replaced by OPD vendor staff.

Another concern that ISV executives discuss more openly is that of retention of employees at the OPD vendor. Due to the high pressure on human resources in the Indian software industry, the employee turnover may be twice or three times that for a mid-sized or large Western company. (Smaller US technology companies in vibrant regions such as Silicon Valley may often see higher turnover.) ISVs selecting OPD vendors should inquire deeply into how each vendor deals with this issue.

Nagarro uses a number of techniques both to reduce employee turnover and to reduce the effect of the turnover. The employee is kept satisfied by building an attractive and open company culture that prides itself on using new technologies and tackling difficult problems. HR practices are geared to address even minor issues immediately before they escalate. Company movies, picnics, games, and services of various sorts are arranged to improve the employee's quality of life, and the impact is reinforced through internal marketing initiatives.

To reduce the effect of the turnover that cannot be eliminated, Nagarro encourages a small portion of its developers to cycle through customers and projects. This further encourages the teams to build and maintain customer-specific training programs for new team members that start from the business background of the software product and drill all the way down into the intricacies of the code. The overhead for doing this is included by Nagarro in its billing rate, which also includes the overhead for "shadow" team members that are not billed but are in the process of picking up speed on that particular project. "Most customers protest at first when we suggest that we rotate some engineers in and out of the project," says Manmohan Gupta, CTO of Nagarro. "Over time, however, they are almost always thankful that we do so. When we lose a person on our team, the ramp-up of the replacement from the shadow pool is almost immediate. In fact, customers often ask for copies of our training material or even one-on-one training itself when they lose their own people. We're glad to share what we have with them, because in the end it's all about winning together."

Choosing an offshore strategy

At some stage, all successful ISVs have to decide whether or not to open their own development centers in India. For small and mid-size companies, this decision often takes place in an extremely dynamic and uncertain environment, with some difficulty stemming from not being able to plan out for more than a year or two.

It is becoming the accepted wisdom that, barring special circumstances, ISVs may find it difficult to operate Indian development centers with fewer than 50-75 employees. First, the infrastructural challenges of running a center in India are daunting, with everything from backup power generators to water supply to internet connectivity taking a lot of administrative effort. Second, it is difficult for a small center to get the word out to prospective employees and to convince them of the stability and permanence of their job. Young Indian engineers want to work for a company that others have heard of. They also put a premium on job stability (which is odd given the resource crunch). Further, employees are used to a range of administrative services such as catered food and concierge-type offerings that are difficult for a small ISV to arrange.

A small center may also need to hire to a number of different job descriptions. It is therefore more sensitive to employee turnover. For example, if a database expert quits a project in a large OPD vendor, she may be easy to replace from the pool of database experts. On the other hand, in a small ISV development center in India, she may be the only database expert available and it may take months to replace her.

This realization has triggered what has sometimes been called the Transfer-Operate-Build (TOB) model for ISVs that have already invested modestly to start a development center in India. In this model, an ISV transfers its small India operations to an OPD vendor for a small upfront payment. The ISV guarantees a fixed level of business to the vendor and the vendor pays the remainder of the purchase price over time. The OPD vendor GlobalLogic has shown the way in this regard, most recently acquiring the 65-person India operations of Kewill, a supplier of global supply chain controls software and services.

The TOB model is the reverse of the Build-Operate-Transfer (BOT) model that OPD vendors also offer. In the BOT model, the vendor provides a development team for the ISV, plus the option for the ISV to acquire the team at a future point in time for a pre-agreed sum of money. This model is considered by many ISVs seeking to test the waters in India, but the number of such deals that have actually taken place is very small, perhaps because of contractual complexity. The most popular trend is to start off with an OPD vendor and to delay to a later date the decision on the captive center.

Whatever the strategy chosen, outsourced product development appears very much here to stay. While software companies have paradoxically begun outsourcing their software development some years after non-software companies paved the way, the archetypical product development model that is emerging is clearly one of globally distributed teams.



Q & A feedback from Vikas Sehgal, CEO of NAGARRO INC. reveals the company's OPD strength and strategic growth plans worldwide

Service offerings across Industries Worldwide

Nagarro develops advanced software solutions for manufacturing, pharmaceutical and software companies worldwide. Nagarro works as a strategic partner to help clients meet key business objectives, improve efficiencies and reduce time to market. Nagarro's proven methodology combines elite global development talent with Projistics, a proprietary project management tool, to offer quality, security and control in distributed development environments.

Brief your expertise in offering Offshore Product Development services for global ISVs.

For over 10 years, Nagarro has been the trusted partner for software product companies across the globe. Some of the world's well-known and popular software products, ranging from enterprise software and infrastructure software to shrink wrapped consumer software, include contributions from Nagarro. We bring a powerful combination of leading-edge technological expertise and time-tested development processes that make our clients' goals a reality. Whether it is development of entire products, or just portions of them, Nagarro can act as an extension of the engineering team of an ISV.

Advantages of your Offshore / Onshore / Nearshore locations (USA, Europe and Asia Pacific perspective) if any...How do you leverage each locationclient perspective !

Nagarro provides services from its worldwide offices as well as at our client locations. For each client we identify what location and model would provide the most efficient and effective delivery for the customer's needs which may or may not always be the cheapest model. We may provide onshore business analysis and information architecture services to customers in order to get their product concept crystallized. We may provide onshore technical architecture consulting in order to improve the product longevity, stability and robustness. We may provide offshore software development, coding and testing services in order for the client to leverage the high availability of such talent and improve time to market.

List of International certifications granted if any ...and brief on how they have been boosting up your business prospects ...

Nagarro is a Microsoft Gold Certified Partner for Custom Application Development and Business Intelligence Competencies. It is also an SAP Netweaver Partner, an Informatica Implementation Partner, a Cognos Consulting Partner and an InterSystems Technology Partner. Nagarro is currently certified at CMM Level 3. This places us among the select league of companies which have standardized processes in place for each stage of the software development and maintenance lifecycle.

In our experience, potential customers are most interested in seeing strong track record of referenceable and satisfied clients. Industry certifications and partnerships are good to have but cannot substitute for more concrete accomplishments.

List of major clients in US, Europe and Asia Pacific.

Nagarro provides product engineering services to some of the best known software companies in the world. Components built by Nagarro are part of several multi-billion dollar products. Clients range from early stage startups to Fortune 50 clients. In addition Nagarro also works with some of the largest Pharmaceutical and

Manufacturing customers to assist in internal product development as well as complex line of business applications for internal use.

Where do you feel your competitive strength is concentrated on.. which drives your growth !.

Our competitive strength is the company's mission statement to seek out, understand, innovate for and solve the most challenging technical problems for our customers. This accent on technological pre-eminence helps us recruit and retain the best engineering talent, which in turn helps us attract and satisfy the needs of quality conscious customers.

How do you plan to position yourself in Asia Pacific over the next 5 years in OPD space.

Asia Pacific region has a huge potential for providing the growing need for OPD services. The offshore product development market is expected to grow to more than \$ 10 billion by 2010 and will engage more than 200,000 engineers. Asian countries like India and China, with their large talent pool will provide an ideal destination for ISVs wanting to partner with vendors to provide these product engineering services.

Nagarro will continue to provide high end product engineering services to its ISV clients from its offshore software development centers. We plan to grow to a 3,000 people organization in the next 5 years most of this growth coming from the growing OPD market.

How important are SLAs in your firm's relationship with your clients and How much are you engaged in a client's outsourcing plan ?

For small and mid-sized companies that have not outsourced before, Nagarro is often involved in helping develop an outsourcing strategy and plan. This may include defining how the outsourced work grows over time, how the vendor team interacts with the organization, what work is parceled out for outsource, how issues are resolved, and so on.

Advantages of being located in India.

India provides ideal conditions for being a prime destination for offshore product development. But just being in India is not enough location within India is important as well. Being in Gurgaon (technology hub near Delhi), provides Nagarro the advantage of both having ready access to high quality talent in North India as well as lesser competition for this talent. Nagarro regularly recruits from the Indian Institute of Technology (IIT) the premier engineering university in the country and three of the seven IIT campuses are within 250 miles of Delhi. In addition, the competition for the talent in and around Delhi is much less than some of the other more "beaten-track" location like Bangalore, Hyderabad and Chennai.

When India is leveraging its strength and location to become a global outsourcing hub, how does Nagarro plan to evolve itself in the new and globally competitive environment ?

In order to answer that, we need to see what is being outsourced to India and where Nagarro would like to play. We have carefully chosen to carve out a niche area of outsourcing where we have a distinct advantage. Nagarro stays away from outsourcing that is primarily based on cost arbitrage rather focuses on outsourcing that is based on availability of the right skillset and domain knowledge. That immediately puts us in a different club from most of the major outsourcing players. For example, we have chosen to stay away from outsourcing of business processes, call center, IT infrastructure support, low end maintenance and porting activities etc.

Nagarro will continue to stay the course in high end outsourcing of complex mission critical applications and products. This allows us to attract the best talent that is available since the quality of work is the biggest draw for the top talent.