

# Extraordinary Popular Delusions and the Madness of Crowds<sup>1</sup>

Why *Outsourcing* Product Development to  
India can be a Recipe for Failure

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**A D I T I**<sup>®</sup>

<sup>1</sup> Primary title courtesy of an investment book with same title, originally authored in 1841 by Charles Mackay, Three Rivers Press, 1995.

## Confessions

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Look  
Who's  
Talking

Lest you think, "Who the heck are these guys to talk about India outsourcing?" here are some stripes and battle scars of the founder and management team:

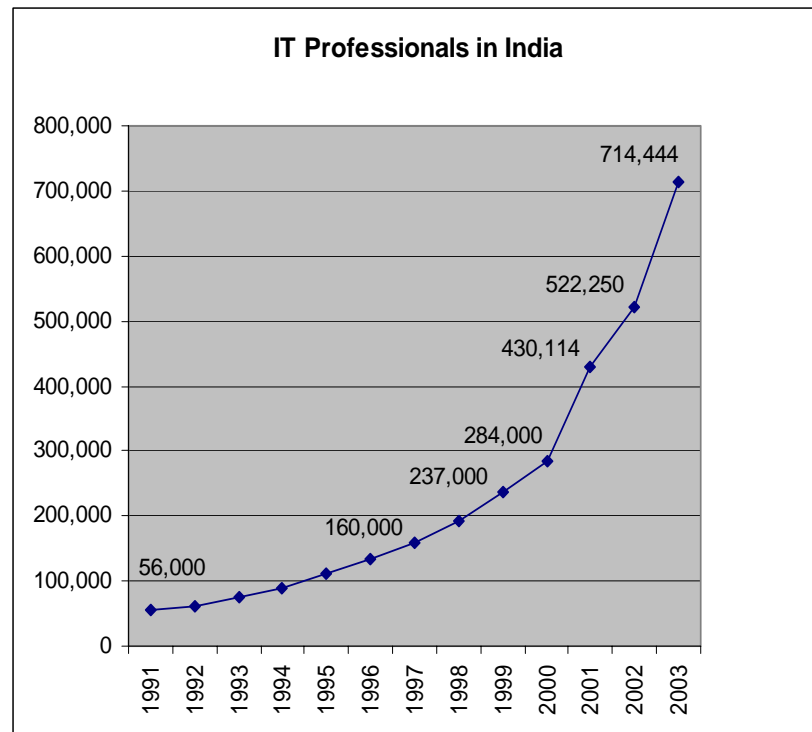
1. Ran Excel, Pen Windows and Windows 95 product teams for Microsoft to learn a thing or two about building R&D teams
2. Spent the better part of a decade building the first-ever enterprise software product company entirely out of India (4.5 million lines of code with 400 man-years of effort). Cool enough business model to raise more than \$70M in venture capital and cool enough product to have customers like Microsoft, Dell, NY Times, Lowe's, Starbucks, etc.
3. Built 100+ extensions to Microsoft products *for* Microsoft
4. Is fighting the daily battle of building and operating development subsidiaries for bleeding edge startups and established companies

The  
California  
Gold Rush

It is interesting to see the parallels between the California gold rush of '49 and the current rush to outsource product development to India. In both cases, there is little precious gold (quality product developers) to be mined. But the perception, of course is there is lots of it, so everyone is running to grab their share of the rocks. As history has shown, when all the dust settled, the money was not made by the diggers, but only by the tool suppliers. So ask yourself, how can I avoid the trap?

Lies, Damn  
Lies, and  
Statistics

The perceived "gold" in India is cheap and strong talent. While there are thousands of programmers coming out of schools every day, there are very few skilled product developers. Here is a chart showing the growth of the IT talent pool in India (Source: NASSCOM).



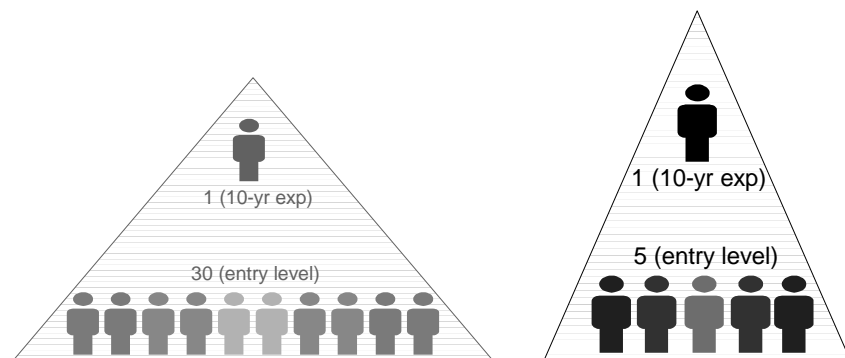
If you think these numbers look comforting, consider these facts:

- More than 95% of this growth comes from entry-level people graduating from colleges and training institutes

- More than 95% of the entire talent has worked only in IT services, Y2K being a major driver before 2000. Very little of this talent has been exposed to product development.
- Finding the managers and executives of your product teams require going back 10 years on this curve. More than half of them moved out of the country for better-paying jobs elsewhere. Of those remaining, very few have worked continuously on products and multiple release cycles.

## The Pyramid Scheme

Life gets more complicated once you start thinking about how your dev teams typically get structured. India has traditionally been ideal for Corporate IT. A typical team structure is a wide pyramid with a single experienced manager of 10+ years supervising 30-50 entry-level people. This model is in sharp contrast to the narrow pyramid structure of product teams where an experienced dev manager or architect does not oversee more than 5-10 entry-level developers. This increases the demand for senior people.



## The Mating Dance

So much for the India supply side. Let's tackle the demand side. How does a typical product company go about building an offshore dev team in India? Here is an algorithmic approach:

1. Start
2. Is there someone senior in R&D willing to relocate to India and do we have the money?
  - a. Yes: Venture into an India subsidiary. Goto End
  - b. No: Begin search for external ODC vendor
3. Look around the company and see if there is anyone who knows India who can drive vendor selection
  - a. Yes: Ask them to drive the process
  - b. No: Work with someone external that we can vaguely trust
4. Define vendor selection criteria
5. Make the initial short list of vendors
6. Send them an RFI to qualify the final list
7. Do vendor visits to finalize
8. Award the contract and closely monitor the whole thing so it doesn't go out of control
9. End

What's wrong with the above approach? Except for setting up your own sub, it's fraught with land mines. The most dangerous step is the criteria you use for vendor selection.

## The Risk of Ignorance

Since there is a high level of uncertainty in choosing the right vendor, you try to compensate with a list of "robust" criteria. Here are some of them and why they don't work.

## SEI-CMM Certification

You want predictability and transparency in your vendor's process. Making sure they are CMM certified, you think, is one way of achieving it. Where is the problem in that? Unfortunately, there are several.

1. The certification process takes a sample of projects and certifies the services company on that. It does not imply that every project they do is or has to be CMM compliant. Thus the only way to make sure of compliance for your product is to enforce it on your delivery.
2. The time it takes for your product delivery to fully comply with the process extends your product ship date by a few months at the least. Will your customers pay extra dollars or wait longer so you can deliver a product through a certified process? Can you at least beat that rogue competitor who seems to ship products faster because he is not CMM compliant? Well, if US dev teams are any indication, the engineering managers took a resounding stand to the contrary. (see an entertaining article by Luke Hohmann that says "...In Silicon Valley the "in" crowd is certainly not the creators or followers of SEI-CMM..")<sup>2</sup>T.
3. Thus the irony of asking your vendor to be CMM compliant is that you want them to be certified, but just don't want them to use it extensively in your delivery.

## Vendor with large stream of Revenues/ Employees

Stability is important to you. So you ask the vendor if they have a large stream of revenue, say north of \$100M. What's wrong with that? Unfortunately, if the vendor has such a level of revenue, they have a high level of corporate IT work producing that revenue as we discussed under the pyramid section. What's the problem still? Ask yourself the question "If US service provider rates suddenly became cheaper overnight, would I outsource my core product development to EDS or Accenture?" The same logic goes for offshore providers as well who are mostly corporate IT service providers. The two cultures of high volume and high density don't mix. Yours truly learned this the hard way building product teams in India for over a decade.

## If you want to control your destiny, Own it

So what is the lesson here? If you want to ensure a high degree of success in your offshore initiative, the least risky way to ensure it is to start your own subsidiary and sweat through it. And if you want to go through a vendor, make sure it is built as your subsidiary from day one. What does that mean?

## In Search of Meaning

You got to build teams where people think and breathe product and share a similar work culture as your onshore team, thus becoming true extensions of your core teams. For startups thinking of outsourcing their entire R&D, the offshore team should be of the same caliber as a similarly built onshore team.

## Begin with the End in Mind

You think BOT (Build-Operate-Transfer) is the best option for you — Get an ODC (Offshore Development Center) started with a vendor real quick, establish that it's working and buy them out at a future point. So if the end is the subsidiary, then you got to think of the ODC team as your subsidiary from day one. As mentioned before, the same qualities that apply to your onshore team should apply to the ODC team today.

The people should be:

- Creative
- Intelligent
- Risk-taking

They got to have:

- Strong sense of ownership
- Pride in what they do

They must be:

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<sup>2</sup> "Certification is Discrimination", James Bach and Luke Hohmann, <http://www.lukehohmann.com/papers/CertificationArticle.pdf>

- Willing to work with changing spec
- Disciplined about the dev process

Build a Gun,  
not a Bullet

Unless you're in it for a quick buck, product teams are marathon efforts. They won't perform to their full capability until they get to v2, or sometimes v3, of the product. Accordingly, your attitude should be that of building a robust gun that you can point to the next target (market) and the following, as conditions change.

What is  
Quality  
anyway?

While building your offshore team, quality should not in any way be compromised. Otherwise it becomes a competitive disadvantage, and you know what happens – Let's not speak ill of the dead.

While the narrowest definition of quality is the number of bugs (that your customers don't discover), it is much broader than that.

- Does it serve the needs of the customers it's designed for?
- Has it responded to competitive environment to maintain your leg up?

Building products that serve such quality needs require a team effort. It is not marketing throwing an MRD to the dev team and asking them to build it exactly as it says. As you build the product, you discover ways you can make it better that are impossible to conceive in market research.

*Side Anecdote: The Genesis of page preview in Microsoft Excel*  
Steve Hazelrig, a developer working on Microsoft Excel team in its early days, was responsible for its printing feature. As he repeatedly ran to the printer down the hall to test his code, he got tired of it and built a page preview feature for himself. The program manager happened to see it and said "F\*&%, Let's ship it!"

Defining an MRD and a target market is just a start to building a robust product. You need independent thinkers who take ownership on the dev side to produce a product that your customers will pay and keep.

## In Closing...

Field of  
Dreams

The promise of India is not just development. It is the possibility of building complete operations that provide a dramatically low cost structure for your company. Realizing that dream requires building a solid foundation with your development team. Once you have that, you can start building all other operational functions around it.

May the Force  
be with You

Building R&D teams anywhere is hard. Doing it in India is even harder. Make sure you take measured steps whether you are doing it on your own or going with a vendor. If you engage with a vendor, choose someone who thinks and acts like a product company themselves, not merely as a service provider.

**May the (dev) Force be with You!**