



2014 iSPIRT Annual Letter

This is our first annual letter. Just as in this message, we will continue to share in a frank way what our goals are and where progress is being made and where it is not. This year we have chosen to focus, not on iSPIRT's initiatives and activities, but on the software product industry itself. We discuss how software products will transform India at large and why the software product industry is strategic to our country. We conclude by explaining the evolutionary stages the rise of the Indian software product industry.

Software Products Will Transform India at Large

We believe that the new generation of Indian software products will have a big impact on improving government, labor, and social productivity. It will make governance more data-driven, small businesses exponentially more productive, and communities more connected.

In India, the majority of economic activity takes place in the informal sector. For the first time ever, self-employed individuals are able to use technology to become efficient and competitive. For instance, a self-employed driver can now be part of a taxi network and have access to new customers. Or a small bus operator can use RedBus and have a state-of-the-art seat management system. In fact, now any small business can embrace a game changing business application easily. This is creating unprecedented opportunities for individuals and smaller firms to create value in their business. As this revolution unfolds, it has the potential to make the informal sector the new engine of economic growth.

Large businesses everywhere are in the midst of massive change where competitive intensity is increasing, where barriers to entry are reducing sharply, and where margins are hard to sustain. There are many ways to characterize the shifts taking place. Hierarchies to networks. Stocks to flows. Centralized to distributed. Broadcast to peer-driven. One-way to two-way. Command and control to community. To cope with all this, a new generation of IT infrastructure and applications is getting deployed. Indian software products are making their mark in this space and several startups have become leading players on a global basis in their specific categories.

Software Products Industry is Strategic to India

Leadership in software products offers a unique opportunity to re-position Brand India. Until the 1990s, there was no industry in which India was seen as a leader; no industry with which India's name was inextricably linked. That changed with India's ascendance in the software *services* industry. When India, for the first time, was featured in the World Economic Forum at Davos; when Indian industry leaders were for the first time sought out by foreign governments as advisors; even when an Indian industry was



for the first time the reason for heated debates in the US Congress and the target of important legislation – in all these cases it was India's success in the software *services* industry that was the driver.

India's success in software *services* also led to the birth of a whole range of outsourcing activities to India including BPO, KPO and LPO.

Yet, in spite of the huge commercial success of the software services industry, the benefits to brand India have been circumscribed. At a broad level, this is because software *services* are essentially a business-to-business (B2B) activity. The brands of software *services* companies become visible only thanks to the persona of their founders and CEOs, their performance on the stock market, and their recruitment activities. Therefore, their brands (and by extension, brand India) don't get a high level of visibility outside India except perhaps in MBA curricula.

Though India's advantage in software *services* transcends cost advantages, it is not unusual even today to see India's success in software *services* referred to politely as a labor cost arbitrage story or sometimes more acerbically by references to cybercoolies and other such derogatory terms due to the lack of inherent IP.

Every country that has made it big on the world stage in the last many decades has had prominent brands that have powered their growth story. Twenty years ago, it was Sony from Japan. Today, it is Samsung from the Republic of Korea. India needs similar brands that can power its global image.

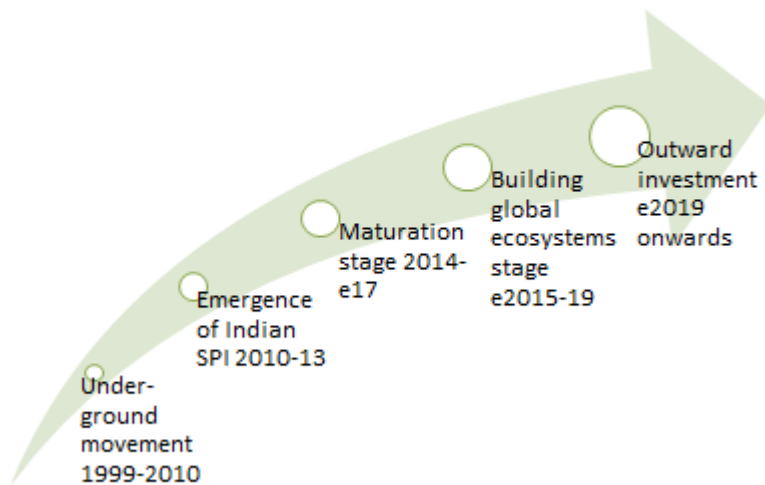
How can India use the foundation created by the software services industry to go to the next level in terms of global branding and soft power? Software products offer one viable route. If India were to have the equivalent of a Google or a Yahoo, that could do the trick.

Software Product Industry Evolution Stages

Given the path dependent nature of hi-tech industry evolution it is essential to understand the context of current industry evolution. Indian Software Product Industry (SPI) has five stages of evolution. The Indian SPI is now entering Stage 3.



Stages of Indian SPI Evolution



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Stage 1: Underground Movement. 1999-2010

During the 11 years since 1999 the Indian SPI was an underground movement. Not many people, even in the IT Industry, were interested in this area. Yet, much was happening. The nascent industry was building confidence.

During this stage, three success stories came to the fore that provided confidence to broader audience that SPI can take root in India. In the Large Business Application Software (LBAS) segment, i-flex showed the way. Its acquisition for over \$1 billion dollars by Oracle was a big boost to Indian SPI. In the Small Business Application Software (SBAC), Tally sold to more than a million SMBs in India. This was a big milestone even by global standards. Tally joined a select club of software product companies in the world that have more than a million business customers. Finally, out of Kolkata no less, FusionCharts sold its charting software to over ten thousand businesses outside India without having any sales office or sales presence in US. This success galvanized the belief in India's ability to be a player in the booming global SaaS market.

Towards 2007, we saw industry leaders in Indian SPI come together, first to celebrate success, then to create media awareness of the Industry and finally to create public goods necessary to take the industry forward.



Stage 2: Emergence of Indian SPI. 2010-2013.

The three success stories mentioned earlier – i-flex, Tally and FusionCharts – acted as an impetus to the creation of SPI startups. Today we have good SPI startup density in Bangalore, Pune and Chennai with NCR, Mumbai and Hyderabad also showing good momentum.

SPI Startup density in India is now high. On Angel List¹, India now has 3.2 times more startups (2123 versus 651) than Israel which is a shining example of the hi-tech industry.

Given these excellent numbers, we don't need policies to boost SPI startup rates. Instead we need policies and institutions to reduce SPI startup failure rates and improve outcomes.

Stage 3: Maturation. 2014-e2017

This is the stage where the SPI with a critical mass of companies needs to consolidate its position. This stage is typically characterized by a string of positive outcomes – substantial VC investments, M&As and IPOs – that give the industry much needed validation and a boost of confidence.

Conventional wisdom, not just in India but across the world, holds that 2123 Indian SPI startups listed on Angel List will have much poorer outcomes than the 651 Israeli SPI startups. This belief is supported by data. An iSPIRT and SignalHill analysis² reveals that India has the worst multiple in terms of M&A exits. In Israel the M&A exit value was ~7X of the VC/PE investment during the same period. In US the multiple was ~5X. In India it was only 1.1X (and this too was inflated because it counted IT Services M&A exits as well).

At this stage of evolution of Indian SPI, we have startups but have poor outcomes for those startups. Therefore the focus has to be on improving SPI startup outcomes rather than boosting SPI startup density. If this is not done, the exceptionally high startup failure rates will trigger disenchantment amongst potential entrepreneurs. This can bring the current momentum in startup density growth to a halt.

To improve SPI startup outcomes several areas have to be addressed. These range from addressing early stage financing gap, to providing better playbooks to SPI startups, to having privileged access to strategic technologies, etc. These are covered in more detail in a later section.

Stage 4: Building Global Ecosystems. e2015-e2019

The speed at which Nokia's handset business deteriorated has shocked everybody. It went from being a market leader in smartphones to being unviable as a company in less than 20 months. Nowadays, Blackberry is undergoing the same tragic downtown in fortunes. In fact this movie has been played several times before in the hi-tech industry. Back in 2001, Glenayre Technologies, a market leader in the two-way pager business, went from a technology darling to a basket case in under two years. Further

¹ Angel List is the leading platform for technology startups looking for early-stage funding. Data as of 3rd Nov 2013.

² This is dated 10th Oct 2013.



back in time, in 1985, the famous Osborne computer had suffered the same fate. Its business collapsed in one year.

Why do some good firms collapse so suddenly? Nokia's CEO Stephen Elop provides the answer in his now infamous 9th Feb 2011 memo. He said:

"The battle of devices has now become a war of ecosystems, where ecosystems include not only the hardware and software of the device, but developers, applications, ecommerce, advertising, search, social applications, location-based services, unified communications and many other things. Our competitors aren't taking our market share with devices; they are taking our market share with an entire ecosystem. This means we're going to have to decide how we either build, catalyse or join an ecosystem."

In many cases, the very success of a product firm results in a competitive response where the battle of products becomes the war of ecosystems. If a firm has not planned for this new kind of competition, it quickly loses its market position and fades away.

We expect that there will be about five software products companies with a billion dollar market cap (e.g. InMobi, Zoho, QuickHeal, Pubmatic, etc.) in the coming years. Of these, at least one of them will have to engage in this war of ecosystems in the coming years. We know that losing this ecosystem war has delirious consequences. In contrast, winning the war of ecosystems has big benefits. By turning a product franchise into an ecosystem, a company becomes less vulnerable and has better financials. There are other benefits as well. Microsoft claims an employment of 15m in its ecosystem³. SAP, Google and OpenSource ecosystems also report similar benefits.

There are significant challenges in creating ecosystems. These relate to three areas. First, there are no clear guidelines for performing correct and insightful modeling of software ecosystems. Second, conducting an ongoing health analysis of an ecosystem is still a daunting data mining task: what are the indicators to look at? How can data be found on the revenues of our partners? How many new entrants join the ecosystem every year? And how much do these really contribute? Third, relates to the issue of Governance. This addresses the issue of how to govern software ecosystems to gain measurable success in terms of staying power, profit, usage and participation.

India has not yet built a software ecosystem though two local ecosystem building projects are underway. Both UIDAI and Akash Tablets are trying to build a software ecosystem around their offerings. This is a good for India to strengthen its ecosystem building muscles.

In time, we are confident that at least one Indian SPI firm will be successful in building an ecosystem around its products. Only when this happens, will it signify that the "next Google" or the "next Microsoft" has been born from India. Getting to this stage is something that (even)the Israeli hi-tech

³<http://www.informationweek.com/microsoft-says-its-software-ecosystem-em/202404791>



industry, despite its success, has not been able to do. What is working in India's favor is the presence of a big domestic market in India.

Stage 5: Outward Investment. e2019 onwards.

This stage is characterized by outward investments to deal with transformative technologies and strengthening of the moat around the India SPI ecosystems. It is only at this stage that a truly sustainable India SPI would be created.

Looking Ahead

We hope you will help get the word out on the power and potential of the software product industry. Tell political leaders that you care about making governance more data-driven, small businesses exponentially more productive, and communities more connected. If you are looking to restore Brand India, root for Indian software products succeeding worldwide. You can help bring about a new belief that India can be a Product Nation.

We all have the chance to create a better product ecosystem where disruptive innovation thrives and serves the cause of improving government, labor, and social productivity. For those of us who believe in the Indian software industry, there isn't any more inspiring work than making iSPIRT successful. We see dedication of our Fellows, Mavens, Saarthis and Voyagers on every challenge the foundation works on. It inspires us to help people pay forward to their professional community of product entrepreneurs, and we feel very lucky to be able to support them. We know the foundation will have its share of setbacks. But we feel sure we will have lots of success stories to share in the years ahead.

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