Global Competitiveness of the Indian Software Industry: Lessons from Ireland

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The recent slowdown of the US economy and the cutback in activities by many leading IT giants like Cisco has sent shivers down the spines of many Indian software companies. Heavily dependent on the US market, these companies are now saddled with surplus manpower. Though Nasscom has been making brave noises, it is quite clear that Indian software companies are a worried lot.

To understand what Indian companies can do, let us first appreciate the difference between a world class company and an also-ran. A world class company can withstand tough times. It does this, either by operating with economies of scale and sustaining cost leadership or by differentiating, innovating and offering a superior product that few others can. Needless to say, for Indian software companies, economies of scale is an unrealistic option. Compared to the global software giants, our software companies look like pygmies. (See table.)

Table

Annual Revenue (1999-2000)

Rank	Company	Revenue in ($ millions)
1	Microsoft	22,956
2	Oracle	10,130
3	Computer Associates	6,103
4	Compuware	2,231
5	Siebel Systems	1,795
6	Tata Consultancy Services	442
7	Wipro Technologies	234
8	Infosys Technologies Limited	192
9	NIIT Limited	163
10	Satyam Computer Services Ltd	147

Source: Nasscom for Indian Companies and Fortune for the US companies

On the other hand, Indian companies with their highly intelligent and talented manpower, have a real opportunity to innovate and occupy niche areas. Indeed, this is what Indians in Silicon Valley have done. Two good examples are Exodus (web servers) and i2 technologies. Unlike Indian companies, which operate on the basis of labour cost arbitrage, many of the NRI entrepreneurs in Silicon Valley provide excellent examples of innovation and value addition.

What can Indian companies do to differentiate and occupy niche areas? We can get the answers from a look at the experiences of the Irish software companies. The Irish IT industry is heavily dependent on the US for generating business. Ireland accounts for one-third of all US electronics investment in Europe. US-owned companies provide 5 per cent of total employment, and half of all exports. Thirteen per cent of Irish GDP depends on exports to the US. Yet, Ireland is quite confident that the downturn in the US will not cause any serious problems.

Though Ireland succeeded in attracting IT companies such as Intel and Dell way back in the 1980s, it is only recently that the country has increased its commitment to software development. Today, Ireland is the

world's largest exporter of computer software. The recent announcement by the prestigious Massachusetts Institute of Technology (MIT) to locate its Media Lab Research Centre in Ireland is a clear indication of the Celtic tiger's growing stature. Nicholas Negreponte[3] the guru from MIT has praised Ireland for the 'great respect for madness' and its 'seamless, anti establishment and chaotic' attitude to innovation. According to Negreponte, "Ireland provides the kind of intellectual, economic and governmental environment ideally suited for this ambitious international effort to transform ways of thinking and creating."

Irish companies have shown a fair bit of commitment to move into niche areas where price alone is not the deciding factor. They do not make false claims about moving into vertical segments like Indian software companies. Instead they develop high tech software for very specialised segments. Massana (which has 80 employees) develops specialised microchips for broad band communications. Parthus (which has 60 people in the US) develops semi conductor designs and software for wireless devices. Havok (which has 35 employees) develops technologies used for creating 3D effects in computer games. Iona, which specialises in middleware-software for integrating non-compatible systems, has designed a product for building and managing corporate Internet portals. Trintech has ambitions of emerging as a global provider of e-payment systems.

The Irish have also understood that there are other important markets besides the US. In particular, they have taken note of Japan's strengths in mobile phone technologies[4] and shown a fierce determination to overcome the cultural and language barriers associated with this strategic market. The Enterprise Ireland Centre in Tokyo has helped some 17 Irish companies set up base in Japan. These include routers company, XIAM and the security company, Baltimore Technologies.

XIAM, which feels that the Japanese mobile market is at least 1½ year ahead of the market in Europe and the United States, has developed an information router technology that allows users to access and solve server problems via mobile devices, something that had not been available earlier in Japan.

Thomas O'Dowd, chief executive and founder of another Irish company, Nooper.com, also hopes to ride the mobile phone boom. His six-person company, which operates entirely over the Internet, offers mobile services and helps other firms build and test applications for the I-mode[5] series. O'Dowd and his team who are also working on a key technology to enable easier Internet access[6], feel that by being in Japan they can be close to the ground when new technologies are released.

Nichiai Computers, another Tokyo-based Irish startup was set up in 1994 by Declan Bourke, his brother John and Andrew Gilbert. Their original idea was to import computer parts into Japan and assemble PCs in the overpriced market. Realising they lacked capital to compete with the computer giants that were just beginning to gear up, they decided to offer Internet consulting, servicing and design services, mainly to foreign clients in Tokyo. Despite the recession, Nichiai doubled sales last year. Bourke has plans to move his team of 12 to bigger offices in central Tokyo.

If small Irish companies can achieve so much and succeed despite a much higher cost of labour than in India, it is because of their efforts to occupy niche value-added segments. The time has come for our IT majors to respond to the situation positively. Differentiation and innovation should be the guiding philosophy, not labour cost arbitrage.

References:

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4. "Technology Crisis", Editorial, *Irish Times*, April 21, 2001.

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   [3]   *Comments made in Financial Times, October 3, 2000*

   [4]   *Comments made in Irish Times, April 13, 2001*

   [5]   Mobile phone Internet access technology developed by NTT DoCoMo of Japan.