



Resilience amid turmoil: Benchmarking IT industry Competitiveness 2009

(Excerpts from the recent Economist Intelligence Unit's report)

In its third annual study into IT sector competitiveness among 66 countries, the Economist Intelligence Unit observes with concern that protectionist instincts are on the rise in many governments' technology sector policies. The IT sector is rightly viewed by most policymakers as an important engine of growth, and economic stimulus packages have often included measures to help boost domestic IT output. The "buy local" provisions attached to some plans, however, fail to recognise the global nature of the IT industry. These and schemes to support "national champions" or other struggling domestic producers will only prevent more

innovative IT firms from being able to compete, and are likely to harm long-term sector competitiveness.

Despite the emergence of such protectionist impulses, the US retains its top ranking in the Economist Intelligence Unit's IT industry competitiveness index in 2009. Other strong performers in the index are Canada and west European countries such as Finland, Sweden and the Netherlands. Each boast highly developed and widely accessible IT infrastructure and offer strong support for technology R&D. US leadership is also cemented by an educational environment which continues to develop high-quality technology talent. In emerging markets,

large pools of skilled IT employees remain a significant advantage for China, **India**,

Russia and other countries, but uneven progress in other areas, such as IT infrastructure, remains a drag on their IT sector competitiveness.

India's Ranking

India ranked 44th in the world in the IT industry competitiveness index, moving 4 notches up from its 2008 ranking of 48, securing an overall score of 34.1 on the IT competitiveness index.

There is a large degree of continuity in the overall index results from last year to this year. Nineteen of the top 20 index countries in 2008, for example, remain in the top 20 this year. However, there have occurred some significant upward or downward shifts for a handful of countries owing both to changes in their performance as well as to improvements in the sources of data used to measure some indicators. The most noteworthy shifts include the following:

Finland has risen to 2nd in the index based mainly on its strong performance in the R&D environment category, particularly patents, and improvement in its overall business environment.

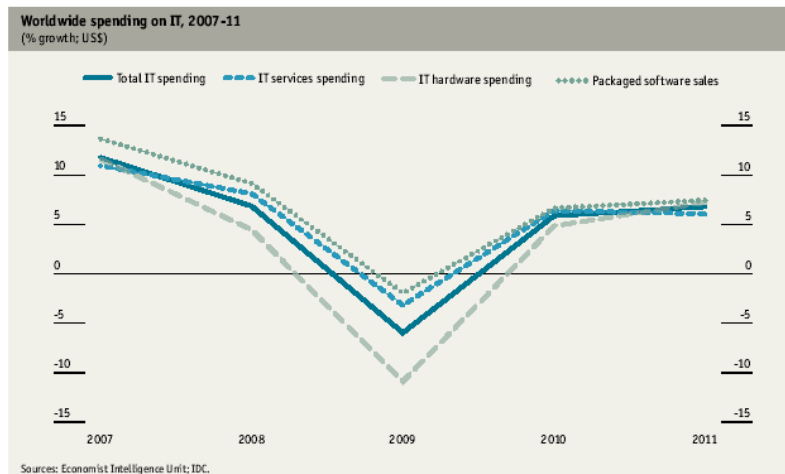
Taiwan and **South Korea** have suffered steep falls—the former from 2nd to 5th and the latter from 8th to 6th—due predominantly to deterioration in their R&D environment scores. These are a result of a

change in the data source used in the index model to score IT-related patents.

China, Russia and **Ukraine** have each climbed several notches in the index table—China and Russia by places and Ukraine by seven places—on the strength of improved scores in the R&D environment and human capital categories. These are attributed to the aforementioned change in IT-related patent data as well as a change in the data used to estimate IT employment levels.

Turkey has fallen eight places in the table owing to deterioration in its R&D environment and human capital scores, which is due primarily to the change in patent and employment data sources mentioned above.

Deterioration in the business environment as well as lower scores in the IT infrastructure and human capital categories are the main reasons behind the index drop suffered by **Thailand** (seven places).



Following are the other major findings of this year's study:

Protectionism and support for “national champions” will hinder recovery efforts—and longer term sector competitiveness. The “buy local” provisions attached to some

stimulus plans have been criticised by some IT industry executives for not recognising the increasingly global nature of the industry. Lavishing public money on struggling companies will also only prevent more innovative firms from being able to compete.

World leaders in broadband penetration	
Denmark	37%
Netherlands	36%
Switzerland	35%
Hong Kong	34%
Norway	33%
Canada	33%
South Korea	32%
Sweden	31%
Finland	31%
Australia	30%

World leaders in mobile penetration	
United Arab Emirates	173%
Greece	171%
Portugal	148%
Estonia	148%
Lithuania	145%
Italy	144%
Bulgaria	141%
Singapore	139%
Czech Republic	134%
Russia	131%

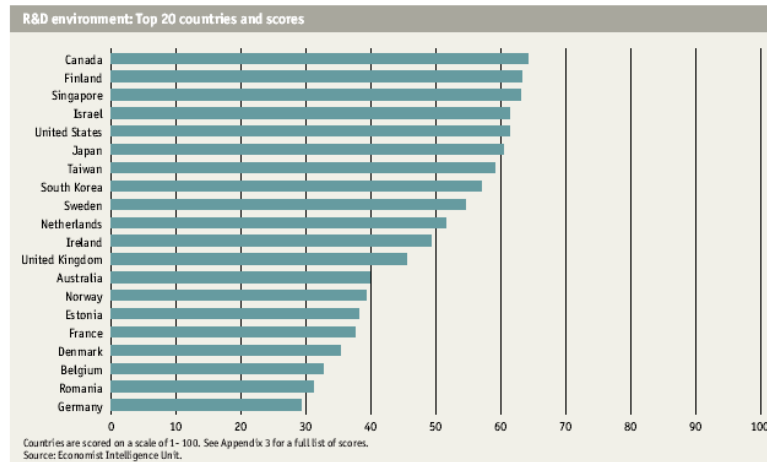
Figures shown represent subscriptions penetration of the population at end-2008. (Individuals may have more than one mobile subscription.)

Broadband networks are becoming increasingly essential to IT firms' competitiveness. Broadband's importance will grow as more IT services and applications are delivered over the Internet. Technology producers in broadband-rich countries in western Europe, North America and developed Asia are clearly at an advantage in this respect. Conversely, the slow march of broadband in emerging markets, including those with large IT sectors such as India, Brazil and Russia, could impede their IT firms' growth.

Investment in skills development remains a long-term imperative. The recession has eased the talent shortages that had plagued many IT firms until about a year ago. But as economies recover and hiring eventually resumes, competition for the best talent will again grow fierce. Coordinated efforts among governments, universities and IT firms are needed to improve the quality of technology training and expand the pool of potential hires. In Asia, IT training would benefit from greater investment in business studies and language skills. In Europe and North America, governments must work with private-sector companies to encourage more young people to choose mathematics and science-based subjects at universities.

IP regimes are improving in many emerging markets, but more progress is needed. Robust IP (intellectual property) protection remains essential to IT sector competitiveness. IP regimes are strong in most developed markets, and emerging economies such as Brazil, Egypt and Vietnam are also registering slow but steady progress, particularly in the area of enforcement. As innovation gradually becomes more important than low-cost labour to IT firms in China and India, IP enforcement is expected to improve in these countries as well.

The crisis has created new economic and business conditions for IT producers, but for policymakers the importance of nurturing competitive IT industry environments to bolster economic growth remains unchanged. Competitiveness begins with open, investor-friendly business and legal environments. Technology innovation is another imperative, whether through expansion of funding available for start-ups or other inducements to technology R&D. Improvement of infrastructure and IT skills development must continue in developed and emerging countries alike. If governments do nothing else, however, they must avoid the siren call of protectionist market practices that will only hinder recovery and harm long-term sector competitiveness.



While the recession has thrown into stark relief some of the problems facing the IT sector in countries around the world, many of the remedies remain the same as in a boom. Perhaps the most important tactic that governments can adopt in the immediate term is to avoid new trade restrictions or “buy local” requirements in the technology parts of their stimulus packages. Worst of all is support for ailing national champions, which impedes the development of the market and the emergence of newer, more innovative players.

At the same time, however, local companies need to be granted fair opportunities if they are ever to prosper. Countries where it is fairly easy to set up and run a business, where the venture-capital industry is an integral part of the business environment and where there is little stigma attached to failure (and there are few penalties for not succeeding) usually boast competitive IT industry environments. Equally important is the need for robust legislation that protects IP rights; in this context, continuing progress in countries such as China and India—where enforcement has historically been weak—is encouraging.

Without a good supply of local talent, countries are unlikely ever to develop competitive IT sectors. For all the IT graduates being churned out of Asian economies, there are still concerns that education systems in the region put too much focus on pure IT skills and not enough on IT in a business context. Top schools in the US and Europe do better in this area. On the other hand, the US and Europe each face long-term challenges in cultivating the science and technical engineering skills of its younger students.

Lastly, beyond current economic stimulus packages, governments can do more to bolster the infrastructure on which the IT industry of the future will depend. Several of our interviewees noted that IT is currently undergoing a sea change, as more applications move off individual sites and into the “cloud”. The efficiency gains that will result from this development could benefit entire economies, but countries—and national IT sectors—that lack the broadband infrastructure needed to access these services will be left behind.

IT industry competitiveness index 2009: Overall scores and ranks

Country	Score	2009 rank	2008 rank	Country	Score	2009 rank	2008 rank
United States	78.9	1	1	Slovakia	41.4	34	31
Finland	73.6	2	13	Poland	40.8	35	32
Sweden	71.5	3	4	Romania	39.6	36	39
Canada	71.3	4	6	Croatia	38.3	37	41
Netherlands	70.7	5	10	Russia	36.8	38	49
United Kingdom	70.2	6	3	China	36.7	39	50
Australia	68.7	7	7	Brazil	36.6	40	43
Denmark	68.6	8	5	Argentina	36.5	41	46
Singapore	68.2	9	9	Malaysia	35.6	42	36
Norway	67.1	10	14	South Africa	35.3	43	37
Ireland	66.9	11	15	India	34.1	44	48
Japan	65.1	12	12	Saudi Arabia	33.9	45	40
Israel	64.3	13	16	Turkey	33.8	46	38
Switzerland	63.5	14	11	Bulgaria	33.6	47	45
Taiwan	63.4	15	2	Mexico	32.0	48	44
South Korea	62.7	16	8	Thailand	31.8	49	42
France	59.2	17	20	Ukraine	31.4	50	57
Belgium	59.2	18	22	Philippines	28.5	51	47
New Zealand	58.8	19	17	Colombia	28.4	52	52
Germany	58.1	20	19	Egypt	26.8	53	53
Hong Kong	57.5	21	21	Kazakhstan	26.4	54	59
Austria	57.0	22	18	Peru	26.0	55	55
Estonia	55.6	23	24	Vietnam	25.0	56	61
Italy	48.5	24	25	Venezuela	24.4	57	51
Spain	47.4	25	23	Sri Lanka	23.9	58	54
Czech Republic	47.0	26	29	Indonesia	22.8	59	58
Chile	46.1	27	30	Ecuador	22.7	60	56
Hungary	46.1	28	28	Azerbaijan	21.3	61	63
Slovenia	45.3	29	26	Bangladesh	21.1	62	60
Portugal	45.3	30	27	Pakistan	20.0	63	62
Lithuania	43.3	31	35	Algeria	19.8	64	65
Greece	43.0	32	33	Nigeria	18.8	65	64
Latvia	42.6	33	34	Iran	17.1	66	66

Countries are scored on a scale of 1 to 100. A four-decimal score is used to determine each country's rank.

Source: Economist Intelligence Unit.

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