

## 2011 IT INDUSTRY COMPETITIVENESS INDEX

# China

### OVERALL RANKING

COUNTRY	2011 RANK	2011 SCORE	2009 RANK	2009 SCORE
Singapore	3	69.8	9	68.2
Australia	8	67.5	7	68.7
Taiwan	13	64.4	15	63.4
Japan	16	63.4	12	65.1
New Zealand	18	61.3	19	58.8
Hong Kong	19	60.8	21	57.5
South Korea	19	60.8	16	62.7
Malaysia	31	44.1	42	35.6
India	34	41.6	44	34.1
<b>China</b>	<b>38</b>	<b>39.8</b>	<b>39</b>	<b>36.7</b>
Brazil	39	39.5	40	36.6
Russia	46	35.2	38	36.8
Thailand	50	30.5	49	31.8
Philippines	52	27.9	51	28.5
Vietnam	53	27.1	56	25.0
Indonesia	57	24.8	59	22.8

### HIGHLIGHTS

- > China improved one place in this year's ranking largely due to improvements in its business environment, IT infrastructure and IT human capital scores.
- > China has experienced strong growth in broadband and mobile penetration, as well as PC ownership, and these trends are likely to continue.
- > Key challenges for China include the need to improve its R&D and legal environments, while persistent government intervention in the IT sector threatens to slow development.

China achieved a position of 38th in the world in the 2011 IT Competitiveness Index, a rise of one place from 39th in 2009. This was mainly due to improvements in scores in three categories: business environment, IT infrastructure and human capital. China is ranked 10th in the Asia-Pacific region, behind India and ahead of Thailand and the Philippines.



## ABOUT THE INDEX

The IT Industry Competitiveness Index gauges the information technology (IT) industry environment of 66 countries by assessing the enablers of competitiveness and determining their relative importance in IT sector performance. Now in its fourth year, it is the centerpiece of a major program of research, created by the Economist Intelligence Unit for the Business Software Alliance, into the forces that drive the competitiveness of countries' IT industries.

A complete description of the Index indicators, scoring methodology, and definitions, as well as written analysis, case studies, video interviews and other content, can be found at [www.bsa.org](http://www.bsa.org).

**Business environment:** China ranked 54th in the world on this measure, an improvement of six places from 2009 though still among the lowest in the world. Its scores improved in terms of openness to foreign investment, private property protection and level of government regulation involved in establishing new businesses. The government's deep involvement in the technology sector has helped to drive investment, but bureaucracy and protectionist impulses will continue to hamper the sector's development.

**IT infrastructure:** Increased IT investment has helped to boost China three places to 48th in the world on this measure. The country, which has the world's largest number of Internet users, has seen significant growth in broadband penetration and PC ownership since 2009, as well as in mobile adoption. The growing importance of e-commerce and mobile banking will boost the sector. China has experienced an e-commerce boom with a number of Chinese Internet firms such as Renren, a social networking site, and Youku, a video-streaming site, conducting high-profile stockmarket listings. One challenge for China is that Internet security remains relatively weak in global comparison, based on the measure of secure servers.

**Human capital:** China places 2nd globally in this category, a rise of two places from 2009. Its high ranking here is thanks to the sheer size of its IT workforce (estimated by the Economist Intelligence Unit to be over 5m, the largest in the world) and the number of students enrolled in tertiary level science programmes. The latter, as well as higher education enrolment overall, have continued to increase in recent years, according to UNESCO. The quality of its technology education — and the skills of its technology workers — receive a relatively modest assessment, although European and US industry executives suggest the picture is improving in this area.

**R&D environment:** China's position remains unchanged at 26th globally. Although it has bettered its scores in key indicators in this category, other countries have registered bigger improvements. Public and private sector R&D spending have both increased in recent years while the proportion of IT patent applications (11% of total applications, according to the World Intellectual Property Organization) and receipts from royalty and license fees have also risen.

**Legal environment:** China declined one position to 41st globally in this category, although its scores remain unchanged from 2009. The country continues to attract significant complaints about the lack of effective intellectual property protection, and China remains on the US Trade Representative's Special 301 Priority Watch List due to these concerns (although the USTR, among others, takes note of domestic efforts to improve enforcement). These weaknesses provide disincentives for firms to invest in R&D and hampers firms trying to move beyond original-equipment manufacturing of consumer IT products.

**Support for IT industry development:** China ranked 58th in the world on this measure, a rise of one place from 2009. This was mainly due to improved access to investment capital. When it comes to government technology neutrality (maintaining an open playing field for all players and technologies), China fares poorly compared to other countries in the Index. The IT sector has to contend with persistent government intervention, and foreign firms face significant barriers to entry as a result of China's "indigenous innovation" policies aimed at bolstering domestic industries. Censorship and intervention also threaten online firms' businesses, evidenced by Google's high-profile retreat from the Chinese market in 2010.