

2011 IT INDUSTRY COMPETITIVENESS INDEX

Brazil

OVERALL RANKING

| COUNTRY | 2011 RANK | 2011 SCORE | 2009 RANK | 2009 SCORE |
|---------------|-----------|-------------|-----------|-------------|
| United States | 1 | 80.5 | 1 | 78.9 |
| Canada | 7 | 67.6 | 4 | 71.3 |
| Chile | 32 | 43.2 | 27 | 46.1 |
| India | 34 | 41.6 | 44 | 34.1 |
| China | 38 | 39.8 | 39 | 36.7 |
| Brazil | 39 | 39.5 | 40 | 36.6 |
| Mexico | 44 | 37.0 | 48 | 32.0 |
| Argentina | 45 | 36.2 | 41 | 36.5 |
| Russia | 46 | 35.2 | 38 | 36.8 |
| Colombia | 49 | 33.7 | 52 | 28.4 |
| Peru | 55 | 25.5 | 55 | 26.0 |
| Venezuela | 58 | 24.5 | 57 | 68.2 |
| Ecuador | 59 | 23.1 | 60 | 22.7 |
| OECD | — | 57.3 | — | 57.1 |

HIGHLIGHTS

- > Progress in the areas of human capital, IT infrastructure and the legal environment have helped Brazil climb a rung in the overall Index table since 2009.
- > Improvements have also been registered in the areas of the R&D environment and business environment.
- > Government support for industry development remains steady and reasonably balanced.

Brazil has edged up in the 2011 IT Industry Competitiveness Index to 39th place, just behind China. It is comfortably ahead of other Latin American countries in the overall Index except for Chile, the regional leader.



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.

Business environment: Brazil's heavily-taxed business environment has remained largely stable since 2009 in the areas most important to IT producers, and it has risen one place in the category table to 36th. The World Economic Forum says Brazil's business sector is 'innovative and sophisticated' in the way that it uses ICT, but the WEF is critical of the country's regulatory framework for IT innovation and deployment. Government policy tightening is expected to curb GDP growth of Latin America's largest market to 4% in 2011 and 2012.

IT infrastructure: Brazil registered advances across most of the indicators in this category, enabling the country to increase its score while maintaining its category rank of 43rd. Domestic spending on IT has continued to increase steadily, according to IDC. PC ownership is also on the increase, although still low, according to ITU data, at 36 per 100 people. Mobile penetration now exceeds 100%, and broadband penetration is rising, albeit slowly, a factor which hinders the uptake of IT services. Gartner describes Brazil as a 'viable outsourcing choice' for a wide range of offshore IT and IT-based services, rating its infrastructure as 'very good'.

Human capital: Brazil moved up two positions in this category from 2009, to 47th place. Enrolment in higher education and numbers of science and engineering graduates have both risen—Brazil now ranks 8th in the world on the latter measure. It's score in quality of technology skills remains unchanged, however, and there are fears of a future dearth in qualified IT professionals to meet demand. However, total IT employment is approaching 750,000, the sixth highest figure in the world, according to EIU estimates.

R&D environment: Brazil's R&D environment is improving: up one place to 32nd and first by a long way among Latin American countries. Public sector and private sector R&D spending have both been on the increase in recent years, although this may change, as president Dilma Rousseff's government called for a major budget cut in science R&D in early 2011. Brazil's patent score has also improved: IT patent applications are now an estimated 9% of total applications, according to the World Intellectual Property Organization (WIPO).

Legal environment: Brazil's legal environment for the IT sector has improved in a number of areas since 2009. Its category rank has risen four places, although at 44th, it remains behind several other Latin American countries. Enforcement of IP rights has improved, although the country remains on the United States Trade Representative's Special 301 Watch List. Data privacy legislation is now on the government's agenda, and the EIU has upgraded the electronic signature score to take account of the country's digital signature law.

Support for IT industry

development: Brazil rose four places in this category rank, to 27th globally, although this is due more to a decline in other countries' scores than to Brazilian improvement. Its score for technology policy neutrality remains positive, as the government has on the whole avoided "picking winners" among companies and technologies. However, it remains to be seen to what extent new import barriers announced by the government in 2011 will extend "buy local" preferences in public procurement of IT.