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Elisa Korentayer, *Harvard University*
Marcelo Coutinho, *Ibope—Nielsen Net Ratings*

> " We need a more clear view of the IT space as being an 'enabler' of the rest of the economy."
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> ***—IT executive, Brazil***

> " [Since 1996] the number of citations of Brazilian scientists has grown three times faster than the worldwide level…we are determined to do everything we can to encourage [the continuation of] that process…because we realize that research is good business."
>
> ***—Brazilian government official***

With Latin America's largest consumer market, Brazil ranks fourth among Latin American nations in Readiness for the Networked World and thirty-eighth overall in this year's Index. While the Brazilian ICT sector responds well to the needs of the country's wealthy users, the challenge remains to extend the benefits of ICT to the majority of the population. Over the last decade, Brazil has been an attractive destination for foreign direct investment; this is expected to decline significantly in the coming year, however. Brazil also has a large, developed industrial sector, due in part to the size of its internal market and the sizeable presence of multinational corporations.

The 1997 privatization of Telebras, the state-owned telecommunications monopoly, led to more telephone lines, higher-quality service, and lower tariffs. By preventing Telebras from becoming an Internet Service Provider, the Brazilian government promoted competition among ISPs, which has helped keep prices low (Ranking in Effect of ISP Competition: 26). In spite of the subsequent network boom, Internet access is still limited primarily to the wealthy, creating concentrated distributions of service in affluent urban areas (Ranking in Public Access to the Internet: 54).

However, the Internet is being adopted quickly, with no small encouragement from *novellas* (soap operas), which have established the Internet as an essential element of Brazilian popular culture. The density of Internet hosts expanded rapidly and is now 0.5 hosts per hundred inhabitants. ISPs are in almost every regional center. Sophisticated service provision offers consumers a great variety of price and service packages, ranging from twenty hours of dial-up at an average of US$14.73 to unlimited broadband packages at US$40 per month.

There is a flurry of activity encouraging technology in education at the state and local levels, which, in the future, may help to alleviate the current shortage of qualified workers for the telecommunications and technology industries. Internet use is high for businesses and increasing for individuals. About 3 percent of Brazil's population used the Internet in 2000, and this proportion is expected to surpass 10 percent in 2004[1] (Ranking in e-Commerce micro-index: 18). It is estimated that Brazilians will spend more than US$1 billion on e-commerce in 2001.[2]

The Brazilian economy has to overcome a number of obstacles before it can fulfill its potential. In 2001, a long-predicted energy crisis hit industrial users hard. High taxes for computers and ICT products compound the already high costs of technology. Foreign investment is slowing. Nevertheless, Brazil's hardware and software industries are doing well despite the challenges of piracy and the gray market (Ranking in Availability of Local IT Services: 16).

Until recently, the Brazilian government had lacked effective long-term policies for industry and government, but it has taken steps to remedy this. The Ministry of Science and Technology launched the Information Society Initiative in 2000, an ambitious plan to coordinate and leverage all government initiatives on the Internet. During the past few years, the quality and high use of online tax systems and other e-government initiatives have garnered international attention (Ranking in e-Government micro-index: 15).

Brazil

Key Facts

Population	170,000,000
Rural population (% of total population) 1999	19.28 %
GDP per capita (PPP)	US$7,389
Global Competitiveness Index Ranking, 2001–2002	44
UNDP Human Development Index Ranking, 2001 (adjusted to GITR sample)	50
Main telephone lines per 100 inhabitants	18.17
Telephone faults per 100 main telephone lines	2.81
Internet hosts per 10,000 inhabitants	51.53
Personal computers per 100 inhabitants	4.41
Piracy rate	58.00 %
Percent of PCs connected to Internet	11.69 %
Internet users per host	11.23
Internet users per 100 inhabitants	5.78
Cell phone subscribers per 100 inhabitants	13.63
Average monthly cost for 20 hours of Internet access	US$14.73

	RANK
Networked Readiness Index	**38**
Network Use component index	**40**
Enabling Factors component index	**34**
Network Access	**39**
Information Infrastructure	41
Hardware, Software, and Support	36
Network Policy	**42**
Business and Economic Environment	55
ICT Policy	28
Networked Society	**40**
Networked Learning	36
ICT Opportunities	25
Social Capital	60
Networked Economy	**30**
e-Commerce	18
e-Government	15
General Infrastructure	58