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> " Currently the most pervasive problem is the poor performance of the economy which affects investment in the industry."
>
> ***—IT manager, Colombia***

> " Underdevelopment is not an economic problem, it is a cultural one, especially in knowledge-based industries. Colombia has started to understand this."
>
> ***—Colombian business executive***

Civil strife and economic crisis have challenged Colombia's growth potential by forcing many of its people and businesses, and capital abroad. There are numerous ICT-related initiatives by government, private sector and nongovernmental organizations. The government's Connectivity Agenda, which developed one of Latin America's first national ICT strategies, has achieved some success, although most observers believe it has not engaged the private sector adequately (Ranking in Effectiveness of Government ICT Programs: 55). There has been progress in developing ICT industry competitiveness, information infrastructure, ICT education, electronic government, and ICT policy, but challenges remain, including rural-urban differences, a weak financial system, uneven computer science education, and the need for greater telecommunications competition. The nation ranks fifty-seventh in overall Networked Readiness.

The second half of the 1990s saw the number of telephones per hundred people increase by half, giving Colombia the continent's third highest teledensity. There is good access to the international gateway, a Network Access Point (NAP), a vibrant mobile wireless sector, and a good electricity supply.

There are serious interrelated infrastructure challenges related to disconnected rural areas and network sabotage. Teledensity in rural areas barely exceeds 3 percent, while the teledensity in cities is ten times that.[1] Half of rural areas have no lines. There have been repeated attacks on infrastructure, and many ISPs host abroad for fear of NAP vulnerability.

The wealthiest telephone users subsidize the poorest, and a flat-rate tariff was introduced in 2001 to encourage dial-up Internet use by discounting Internet calls and limiting monthly charges. Previously, there were complaints about customs duties on ICT goods, but with reduced tariffs and PCs under US$1,500 tax exempt, low income remains the major problem in increasing PC penetration.

With illiteracy below 10 percent, good higher education, and technology and learning initiatives underway, Colombia has some bright spots, but 30 percent of its children do not reach fifth grade, and 84 percent lack tertiary education.[2] Rural areas are particularly hard hit. Some attempts to use ICT in learning are financed by a budget set aside by the government. In Bogotá, hundreds of schools were connected to the Internet (Ranking in Internet Access in Schools: 42), and hundreds of teachers were trained in informatics. Computer labs were placed in more than 750 schools nationwide.[3]

Despite economic problems, Internet users and domains continue to grow rapidly. Internet use has become more common around the country, but most users in 1999 were in Bogotá and Medellín. Medellín's public utility company subsidizes up to 200,000 PCs and unlimited Internet access for $US30 per month,[4] and the city boasts a major public access program (Ranking in Public Access to the Internet: 37).

Regardless of the difficulty in accessing capital and the insecure climate, ICT businesses are growing and benefiting from strong private-sector leadership and increasing government support. Top universities are adapting curricula, and even requiring fluent English, for an undergraduate computer science degree. Companies are embracing the world's best practices and standards (ISO 9000 and CMM), and universities have launched several software engineering research programs with the private sector (Ranking in Quality of IT Education: 60).

National government ministries are online and accessible through the national portal, which supports transactions (Ranking in Online Government Services: 37). Medellín's government is directing business toward its IT companies, offering tax incentives and guaranteeing necessary infrastructure.

Colombia

Key Facts

Population	42,300,000
Rural population (% of total population) 1999	26.52 %
GDP per capita (PPP)	US$5,923
Global Competitiveness Index Ranking, 2001–2002	65
UNDP Human Development Index Ranking, 2001 (adjusted to GITR sample)	46
Main telephone lines per 100 inhabitants	16.91
Telephone faults per 100 main telephone lines	59.90
Internet hosts per 10,000 inhabitants	11.06
Personal computers per 100 inhabitants	3.31
Piracy rate	53.00 %
Percent of PCs connected to Internet	2.90 %
Internet users per host	18.75
Internet users per 100 inhabitants	2.07
Cell phone subscribers per 100 inhabitants	5.33
Average monthly cost for 20 hours of Internet access	US$14.00

	RANK
Networked Readiness Index	**57**
Network Use component index	**53**
Enabling Factors component index	**60**
Network Access	**51**
Information Infrastructure	59
Hardware, Software, and Support	43
Network Policy	**52**
Business and Economic Environment	63
ICT Policy	41
Networked Society	**59**
Networked Learning	55
ICT Opportunities	62
Social Capital	61
Networked Economy	**59**
e-Commerce	60
e-Government	49
General Infrastructure	69