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"The performance of our university students in international programming contests clearly indicates that Bangladesh has world-class IT skills."

> —Computer science professor, Bangladesh

"There is very little cooperation between the government and the private sector in formulating national IT strategies. It seems that we are always having to fight to get the government's attention."

—Executive of Bangladeshi IT company In Bangladesh, Networked Readiness, like overall social and economic development, is hampered by massive overpopulation, a low literacy rate, and frequent natural disasters. But the nation is making progress on these fronts with improved disaster prediction and management systems, reduced population growth, less dependence on foreign aid, and increased export revenues. The primary bottleneck continues to be rampant bickering among political parties. The nation ranks seventy-third in overall Networked Readiness.

Bangladesh is taking initial steps toward exporting software, and is widely acclaimed for its pioneering efforts to take communication technologies to the poor. GrameenPhone is the best-known example, with its venture to introduce cellular payphones in villages. The government is particularly hopeful about the prospects of an ICT industry to help diversify the economy and reduce its dependence on garment export, which currently represents the bulk of export revenues. However, substantial challenges remain to be overcome before optimism is translated into concrete results.

Two of the most ubiquitous hindrances to ICT development in Bangladesh are the nation's largely inadequate telecommunications infrastructure and a lack of effective telecommunications regulation (Ranking in Effect of Telecommunications Competition: 67). Telephones are scarce, expensive, and highly concentrated in affluent sections of urban areas. As a consequence, there has been rapid growth in the mobile telephony market, with many business institutions owning more mobile telephones than fixed-line telephones. The Internet is also becoming more popular, but it is affordable to only a small urban section of the population. Although the government has recently taken some positive steps, such as deregulation of VSAT, the absence of an independent telecommunications regulator

largely contributes to Bangladesh's having some of the highest telecommunications costs in Asia.

There are signs of increasing activity in the ICT sector. More than 200 software companies have sprouted up over the last four years, relying on cheap labor, basic English-language skills, and favorable support from the government in terms of tax relief and financing options. A majority of the companies are small, with fewer than 15 employees, and some of the bigger ones are engaged in limited software export, but the total amount is still negligible by international standards.

One of the most immediate barriers to software development is the lack of availability and low quality of ICT education. Nationally, fewer than 2,000 computer science/computer engineering students graduate annually.1 Although all universities have introduced computer science departments, most are in dire need of qualified teachers, a consequence of the massive brain drain of ICT skilled personnel (Ranking in IT Brain Drain: 74). The exploding demand for ICT education is being satisfied by mushrooming growth in the number of ICT training centers, a majority of which have little quality control (Ranking in Quality of IT Education: 73).

In the emphasis on software export in the national ICT agenda, the potential of ICT in the domestic market has had little attention. As a result, the development of e-commerce and e-government in Bangladesh has been quite limited. B2B e-commerce is almost nonexistent, while many B2C e-commerce sites are mostly targeted toward expatriate Bangladeshis. A few government institutions are quite progressive in the use of ICT, but no concerted effort toward e-government exists yet.

Key Facts

Population	137,000,000
Rural population (% of total population) 1999	76.04 %
GDP per capita (PPP)	US\$1,561
Global Competitiveness Index Ranking, 2001–2002	71
UNDP Human Development Index Ranking, 2001 (adjusted to GITR sample)	73
Main telephone lines per 100 inhabitants	0.34
Telephone faults per 100 main telephone lines	17.32
Internet hosts per 10,000 inhabitants	0.25
Personal computers per 100 inhabitants	0.09
Piracy rate	NA
Percent of PCs connected to Internet	2.31 %
Internet users per host	16.67
Internet users per 100 inhabitants	0.04
Cell phone subscribers per 100 inhabitants	0.14
Average monthly cost for 20 hours of Internet access	US\$25.46

RANK

or	ked Readiness Index	
Vet	work Use component index	
na	bling Factors component index	
	Network Access	
	Information Infrastructure	
	Hardware, Software, and Support	
	Network Policy	
	Business and Economic Environment	
	ICT Policy	
	Networked Society	
	Networked Learning	
	ICT Opportunities	
	Social Capital	
	Networked Economy	
	e-Commerce	
	e-Government	
	General Infrastructure	