Competitive Benchmarking: Sri Lanka Knowledge Services

With a highly skilled workforce and a cost-competitive business environment, Sri Lanka is emerging as a hidden gem for IT and business process outsourcing (BPO) and knowledge services outsourcing (KPO).

Overshadowed by a long-running war and the success of India's information technology (IT) industry, Sri Lanka is unrecognized by most as a center for delivering IT, business process outsourcing (BPO), and other knowledge services. When A.T. Kearney interviewed a cross-section of executives responsible for selecting global locations for their IT and BPO centers, most expressed surprise that Sri Lanka would even be an option.

Below the radar of most industry observers, however, a significant knowledge services industry has been developing in Sri Lanka. The first IT and BPO companies established operations in Sri Lanka as far back as the 1980s. Today, more than 300 IT and BPO companies have operations in Sri Lanka, more than 60,000 people hold IT or BPO jobs, and the sector generates more than $400 million in exports. Several well-known international firms such as HSBC, IFS, Motorola, HP subsidiary MphasiS, RR Donnelley, and WNS have established R&D, IT, and BPO centers in Sri Lanka. Meanwhile, Sri Lanka-based firms provide advanced services to blue-chip global clients, including Google, Lenovo, Microsoft, Nokia, JPMorgan, the London Stock Exchange, Santander Bank, and Emirates Airlines (see sidebar: Highlights of Sri Lanka's Knowledge Services Industry on page 8).

The industry extends well beyond the traditional idea of software development centers, large-scale call centers, and transaction processing centers. With a formidable concentration of internationally certified accountants, Sri Lanka-based firms have taken a lead in providing sophisticated accounting services and financial analytics to global clients. Others are already tapping into Sri Lanka's long tradition of professional services to provide offshore legal services, medical diagnostics, and architectural drawings. Indeed, Sri Lanka is a knowledge hub, exporting its human capital and skills to the world; the country has been exporting managers, engineers, doctors, and other technicians to run tea plantations, apparel factories, medical clinics, and other complex operations for many years. Now, thanks to IT, global companies and customers can tap into these professional skills from anywhere in the world.

Sri Lanka instituted economic reforms in the 1970s and has followed pro-business and pro-investment policies ever since.

Sri Lanka offers a unique mix of extremely low costs—among the lowest anywhere—combined with a highly educated, English-speaking population with sophisticated technical skills, and a business environment and infrastructure that is superior to most low-cost countries. Furthermore, contrary to the image created by the earlier conflict, Sri Lanka is among the safest, lowest-risk emerging markets, both in terms of personal safety and business security. The government also offers generous incentives for investors in the sector, including exemptions from corporate taxes and import duties along with grants and subsidies for training programs.

With a population of only 20 million, Sri Lanka does not offer the size advantages of countries such as China, India, and the Philippines. However, recognizing its small scale, Sri Lanka has tended to focus on higher-value niche products across industries. Sri Lanka continues to lead the world in high-value niches, including fast fashion and ethical apparel in the clothing industry, solid tires and surgical gloves in the rubber industry, single-origin teas in the tea sector, and activated carbon in the coconut sector. Similarly, niche knowledge services

offerings are a major benefit for companies planning to add complementary locations to their existing global operations footprints. Those that have centers in Sri Lanka and elsewhere tend to do their more complex, specialized work in Sri Lanka while performing larger-scale transactional work in India and the Philippines. These offerings are also a key differentiator for small- and medium-size customers, which can get a level of attention and access to top-level talent that they would never get in larger centers in other countries.

In particular, thanks to its proximity to India, similar costs and talent profile, lower levels of attrition and wage inflation, and superior business environment and infrastructure, many companies are viewing Sri Lanka as a natural complement to their operations in India—allowing expansion in a less-overheated environment while diversifying country risk.
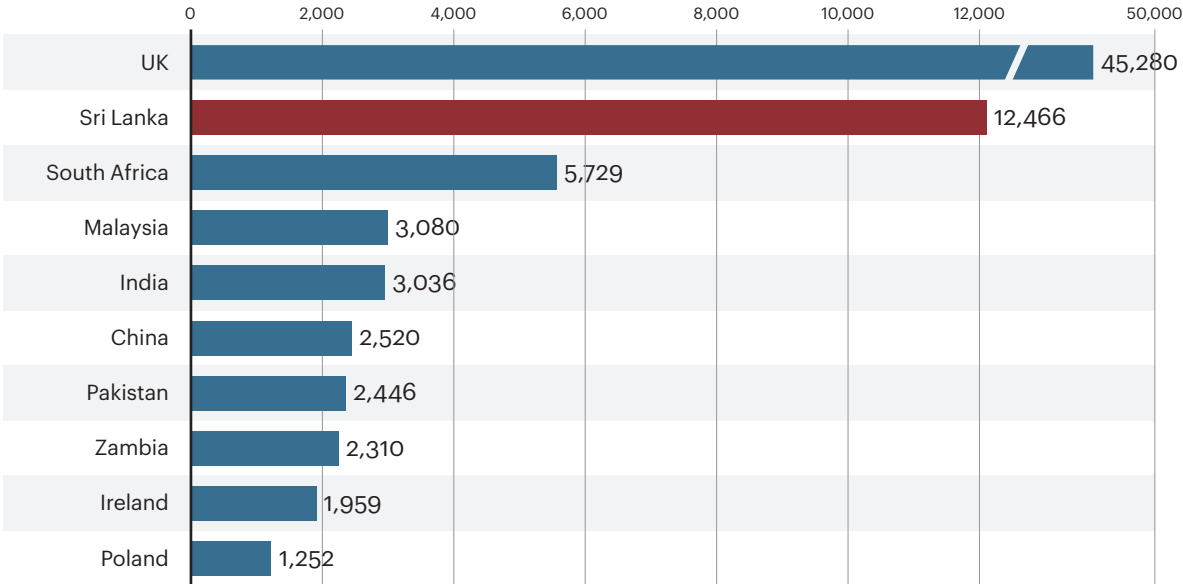
Sri Lanka's Professional Services Capabilities

Sri Lanka is uniquely positioned to compete in knowledge process outsourcing (KPO) because of its numerous certified professionals, including accountants, lawyers, doctors, and architects. About 50 percent of students earning higher education degrees are trained in technical and business disciplines.

Sri Lanka has already carved out a niche in financial and accounting outsourcing (FAO) thanks to its strong talent base. The country boasts the second-highest number of Chartered Institute of Management Accountants (CIMA) students in the world (see figure). Thousands of students also pursue qualifications from the Association of

Chartered Certified Accountants (ACCA) and the Association of Accounting Technicians (AAT). Sri Lanka also boasts a significant number of graduates and prospective graduates with U.S. qualifications such as certified public accountants (CPA).

Figure
Sri Lanka has a niche in finance and accounting outsourcing

Students in CIMA programs[1]
2011 enrollment

Country	Students
UK	45,280
Sri Lanka	12,466
South Africa	5,729
Malaysia	3,080
India	3,036
China	2,520
Pakistan	2,446
Zambia	2,310
Ireland	1,959
Poland	1,252

[1] CIMA is the Chartered Institute of Management Accountants.
Sources: CIMA; A.T. Kearney analysis

Sri Lanka has developed strong companies offering financial and accounting outsourcing (FAO), open source software development and support, and mobile application development (see sidebar: Sri Lanka's Professional Services Capabilities on page 3).

Of course, Sri Lanka is not perfect: although its infrastructure tends to be less overstretched than in other low-cost countries, there is still room for improvement. International telecom bandwidth costs are high by regional standards, and as the sector continues to grow, the government needs to take preemptive steps to encourage development of increased office space and infrastructure to serve the needs of the knowledge services industry.

The number of **Sri Lankans holding IT or BPO jobs has almost doubled** from 34,000 in 2006 to 63,000 in 2011.

Reminiscent of many former British colonies, Sri Lanka tends to have a highly structured regulatory and bureaucratic environment. Although this can be beneficial in upholding investors' rights and driving improved enforcement of intellectual property, it also results in rigid practices in areas such as labor regulations. Existing investors say the government is quick to make exceptions to meet their needs, but more formal reforms may be needed if Sri Lanka is to project the correct image as a global knowledge services hub. Like other smaller countries such as Ireland, Mauritius, and Singapore, Sri Lanka needs to offset its relative size disadvantage by excelling in the quality of its workforce skills, infrastructure, and business environment.

Sri Lanka already offers global companies unique advantages as a location for delivery of sophisticated knowledge services. With the end of the conflict and active investment and reforms by the government, the industry will most likely exceed its own ambitious target to generate more than $1 billion in revenues by 2016.
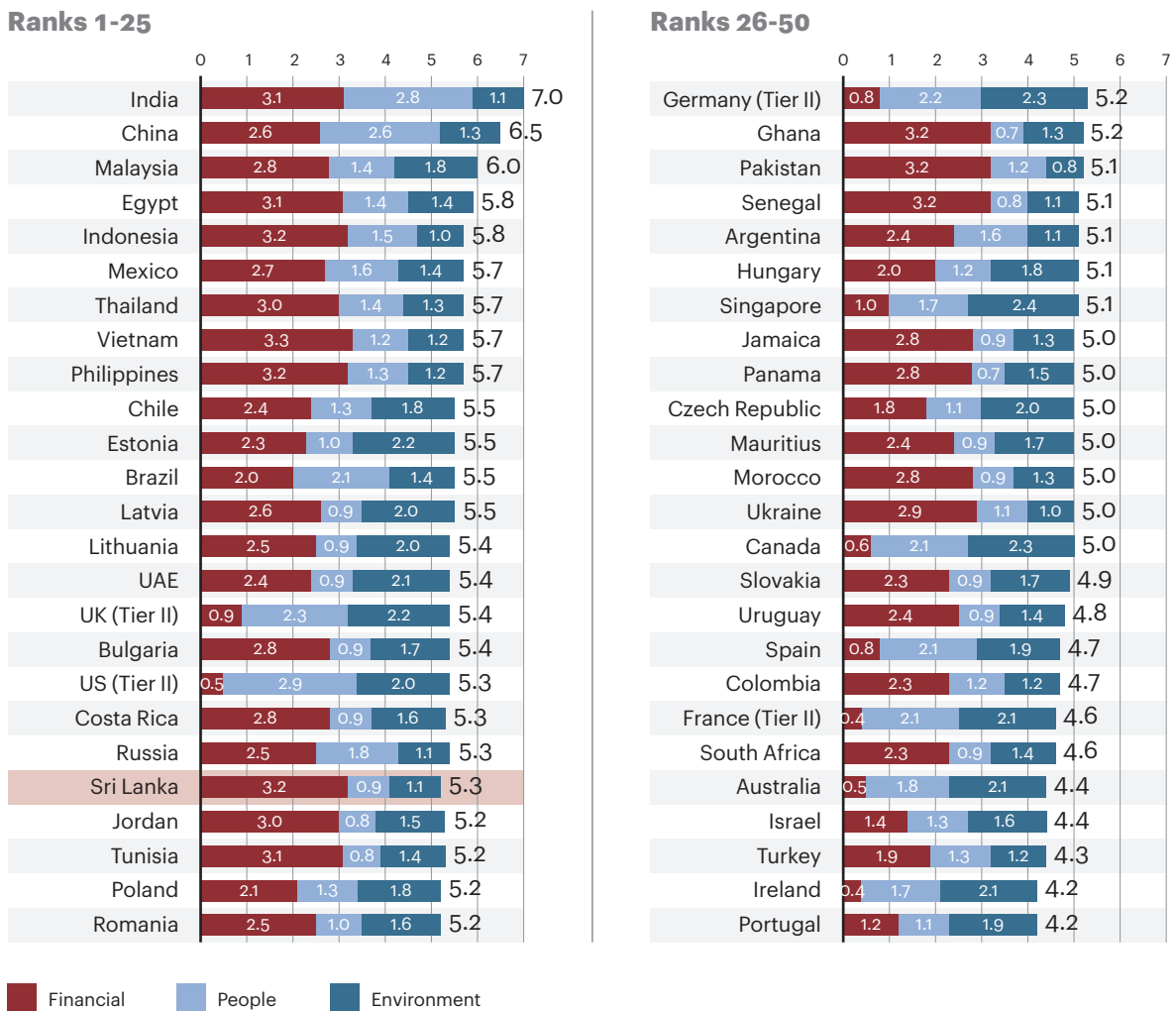
Benchmarking Sri Lanka

To better understand Sri Lanka's relative strengths and weaknesses as a location for IT, BPO, and other knowledge services, Sri Lanka's Information and Communication Technology Agency (ICTA) asked A.T. Kearney, a leading global management consulting firm, to benchmark Sri Lanka against other leading knowledge services locations. As an adviser on global strategy and operations to many of the world's leading corporations, A.T. Kearney has been evaluating the pros and cons of different services locations for more than a decade. Since 2003, A.T. Kearney's Global Business Policy Council has been publishing the Global Services Location Index™, widely regarded as one of the world's leading barometers on the relative attractiveness of different countries as locations for delivery of IT, BPO, and other knowledge services. The Index evaluates countries as services locations based on their underlying fundamentals in three categories: financial attractiveness, people skills and availability, and business environment. Over the past nine years, the number of countries included in the Index has grown from 11 to 50, reflecting the increasing range of countries that global corporations are evaluating as potential locations for delivery of knowledge services.

Sri Lanka ranks 21st in the Global Services Location Index (see figure 1). Given the general Index's relatively heavy emphasis on size of workforce and size of existing IT/BPO industry in each country (as indicators of the relative size of the talent pool), this is an impressive ranking for Sri Lanka; smaller countries do not tend to do as well in the Index when compared to giants such as China, India, Egypt, and Mexico. While larger countries will continue to dominate the global industry, several smaller countries, including Costa Rica, Ireland, Israel, and Singapore, have established themselves as significant knowledge service hubs by focusing on the quality of their skill base, infrastructure, and business environment. Sri Lanka clearly has the potential to do the same.

To assess Sri Lanka's strengths and weaknesses in more detail, this study takes the key metrics included in the Global Services Location Index and compares Sri Lanka's performance on each metric against other locations that companies are likely to consider as alternatives or

Figure 1
A.T. Kearney 2011 Global Services Location Index™

Ranks 1-25

Country	Financial	People	Environment	Total
India	3.1	2.8	1.1	7.0
China	2.6	2.6	1.3	6.5
Malaysia	2.8	1.4	1.8	6.0
Egypt	3.1	1.4	1.4	5.8
Indonesia	3.2	1.5	1.0	5.8
Mexico	2.7	1.6	1.4	5.7
Thailand	3.0	1.4	1.3	5.7
Vietnam	3.3	1.2	1.2	5.7
Philippines	3.2	1.3	1.2	5.7
Chile	2.4	1.3	1.8	5.5
Estonia	2.3	1.0	2.2	5.5
Brazil	2.0	2.1	1.4	5.5
Latvia	2.6	0.9	2.0	5.5
Lithuania	2.5	0.9	2.0	5.4
UAE	2.4	0.9	2.1	5.4
UK (Tier II)	0.9	2.3	2.2	5.4
Bulgaria	2.8	0.9	1.7	5.4
US (Tier II)	0.5	2.9	2.0	5.3
Costa Rica	2.8	0.9	1.6	5.3
Russia	2.5	1.8	1.1	5.3
Sri Lanka	3.2	0.9	1.1	5.3
Jordan	3.0	0.8	1.5	5.2
Tunisia	3.1	0.8	1.4	5.2
Poland	2.1	1.3	1.8	5.2
Romania	2.5	1.0	1.6	5.2

Ranks 26-50

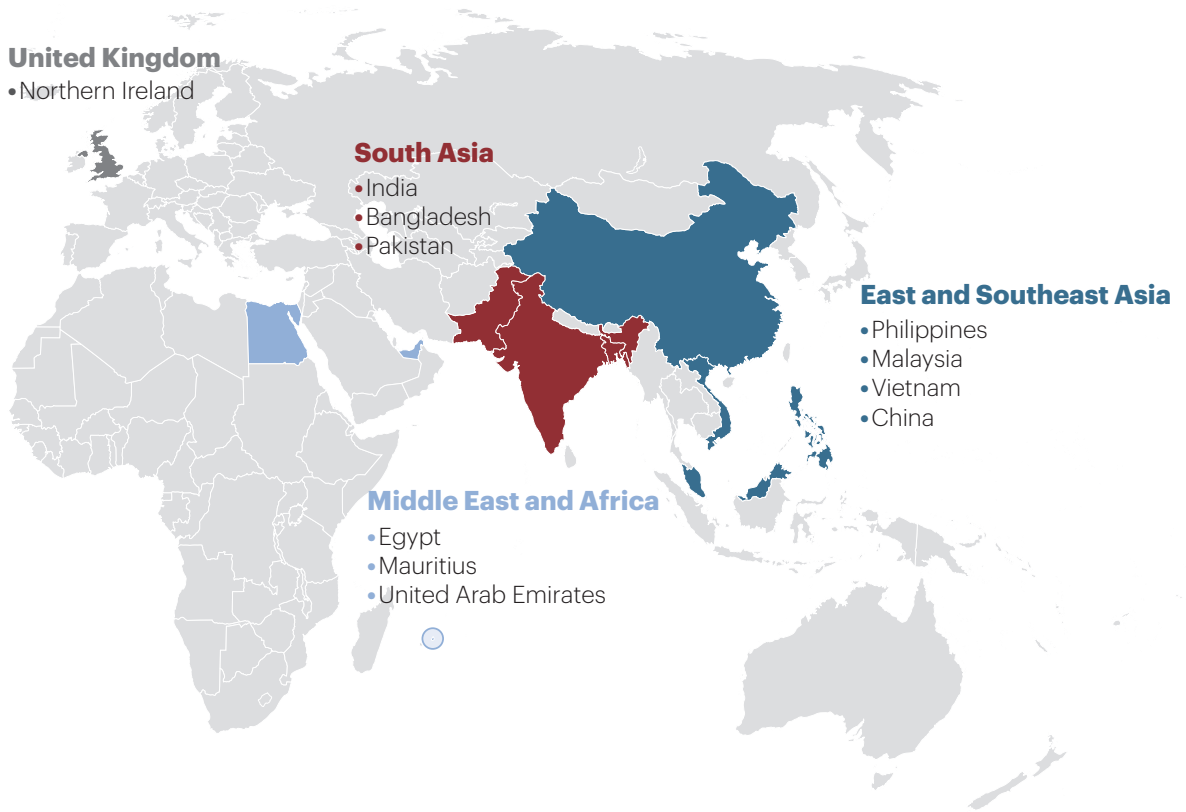| Country	Financial	People	Environment	Total
Germany (Tier II)	0.8	2.2	2.3	5.2
Ghana	3.2	0.7	1.3	5.2
Pakistan	3.2	1.2	0.8	5.1
Senegal	3.2	0.8	1.1	5.1
Argentina	2.4	1.6	1.1	5.1
Hungary	2.0	1.2	1.8	5.1
Singapore	1.0	1.7	2.4	5.1
Jamaica	2.8	0.9	1.3	5.0
Panama	2.8	0.7	1.5	5.0
Czech Republic	1.8	1.1	2.0	5.0
Mauritius	2.4	0.9	1.7	5.0
Morocco	2.8	0.9	1.3	5.0
Ukraine	2.9	1.1	1.0	5.0
Canada	0.6	2.1	2.3	5.0
Slovakia	2.3	0.9	1.7	4.9
Uruguay	2.4	0.9	1.4	4.8
Spain	0.8	2.1	1.9	4.7
Colombia	2.3	1.2	1.2	4.7
France (Tier II)	0.4	2.1	2.1	4.6
South Africa	2.3	0.9	1.4	4.6
Australia	0.5	1.8	2.1	4.4
Israel	1.4	1.3	1.6	4.4
Turkey	1.9	1.3	1.2	4.3
Ireland	0.4	1.7	2.1	4.2
Portugal	1.2	1.1	1.9	4.2

■ Financial　■ People　■ Environment

Notes: The Index evaluates countries as offshore destinations based on their financial attractiveness, people skills and availability, and business environment. Tier II means we evaluated cities in areas of the country with a lower relative income level.

Source: A.T. Kearney analysis

Figure 2
Country comparisons: 10 offshore and one onshore competitor

United Kingdom
• Northern Ireland

South Asia
• India
• Bangladesh
• Pakistan

East and Southeast Asia
• Philippines
• Malaysia
• Vietnam
• China

Middle East and Africa
• Egypt
• Mauritius
• United Arab Emirates

Source: A.T. Kearney analysis

complements to Sri Lanka. The purpose is to provide decision makers with third-party, cross-country information that presents an impartial set of data against which Sri Lanka can be objectively assessed. As such, this report is intended to serve as a starting point for corporations considering incorporating Sri Lanka into their services footprint.

For the purposes of this study, we selected 11 countries that companies are most likely to consider as alternatives or complements to Sri Lanka when making their location decisions (see figure 2):

- **India.** India is the preeminent global location for IT, BPO, and knowledge process outsourcing (KPO) services and the standard against which other locations are judged.

- **China.** Despite language constraints, the sheer size of the talent pool and the regional market to be served make China the number-two global choice for R&D, IT, and BPO centers.

- **Bangladesh.** Bangladesh's offshore services sector is starting to develop, with a growing number of IT and BPO companies and freelancers in Dhaka.

- **Pakistan.** Pakistan is not yet a major player in the remote services space, but like Sri Lanka it has the potential to become a natural complement to operations in India.

- **Philippines.** Along with India, Philippines is the top choice for English-based operations, particularly for BPO centers and contact centers.

- **Malaysia.** A leading alternative to India, particularly for R&D and software development work, Malaysia emphasizes the quality of its business environment and infrastructure.

- **Vietnam.** Vietnam is an emerging low-cost alternative to China and India.

- **Mauritius.** Similar to Sri Lanka, this island in the Indian Ocean has emerged as a complement to India, with a bilingual English and French population and a good business environment.

- **United Arab Emirates.** Many companies choose UAE as a business continuity complement to operations in Asia, as it provides access to a similar talent pool while offering a superior business environment and infrastructure.

- **Egypt.** Despite the recent political transition, Egypt has emerged as a leading global services location, particularly for companies targeting the European and Middle Eastern markets.

- **United Kingdom.** Along with the United States, Europe is one of the main customer markets that companies serve from their global services centers. As such, it is important to compare potential global locations against locations in these customer markets. In this case, we selected Belfast in Northern Ireland as one of the leading onshore locations in Europe.

We have assessed Sri Lanka's relative attractiveness compared to each of these countries based on the key metrics included in the Global Services Location Index (see figure 3).

Figure 3
Global Services Location Index™ metrics

Category	Subcategory	Description of metrics used
Financial attractiveness	• Compensation costs	• Average annual wages • Average compensation costs for relevant positions such as business process outsourcing (BPO) analyst, information technology (IT) programmer, contact center representative
	• Infrastructure costs	• Average cost of infrastructure (occupancy, electricity, telecommunications) • Blended travel cost to major customer destinations (New York, London, Tokyo)
	• Tax and regulatory costs	• Relative tax burden, costs of corruption, and exchange rate movements
People skills and availability	• Cumulative services experience and skills	• Estimated IT and BPO sector size • Quality and skills ratings for relevant positions (quality of management school and college education, relevant industry certifications for IT, BPO, and contact centers)
	• Labor force availability	• Population ages 15–39 • Total enrollment in post-secondary schools
	• Language and cultural adaptability	• Scores on standardized education and language tests • Personal contact ranking in the A.T. Kearney Globalization Index® which indicates relative international exposure of people through travel, telephone, and remittance
Business environment	• Country risk (economic and political)	• Economic risk based on overall business environment; foreign direct investments (from A.T. Kearney's FDI Confidence Index™), political risk based on political stability, terrorism risk, and regulatory burden
	• Infrastructure quality	• Blended metric of country infrastructure quality (telecom, electricity) • Local infrastructure quality
	• Regulatory compliance	• Intellectual property protection ranking • International standardization information security certifications (ISISC) • Software piracy rates

Source: A.T. Kearney analysis

Highlights of Sri Lanka's Knowledge Services Industry

The depth of Sri Lanka's existing IT, BPO, and KPO operations often comes as a surprise to people. The sector already encompasses everything from large multinationals to innovative local start-ups, providing automated application testing and infrastructure outsourcing, high-end R&D, enterprise resource planning (ERP) implementations, the latest cloud and open-source applications, transcription services and call centers, complex financial research, and legal advice. The following highlights some of the companies providing a range of services from Sri Lanka:

Multinational BPO and KPO centers

- **HSBC**, one of the world's largest banking and financial services organizations, chose Colombo in 2004 to expand its network of group service centers (after Guangzhou, Hyderabad, Bangalore, and Malaysia). HSBC built its own state-of-the-art building for the center, which now employs more than 2,000 full-time employees providing a combination of general banking support and advanced services in areas such as analytics, risk, securities, and compliance.

- **WNS**, a global BPO leader, opened its first location outside India in Sri Lanka in 2004, where it delivers data and multilingual voice support. With a focus on higher-end finance and accounting services, clients include a leading U.K. insurance company, U.K. government agencies, and banking and finance firms.

- **MphasiS**, a Hewlett-Packard subsidiary, established a global delivery center in Sri Lanka in 2010 and plans to employ 2,000 people by 2013. The Colombo center, an integral part of the MphasiS network, provides applications, IT, and BPO services to clients worldwide.

- **RR Donnelley**, Sri Lanka's oldest and largest third-party BPO provider, offers knowledge-based transaction processing and financial services to U.S. and European clients via its global outsourcing service.

- In 2011, Dialog Axiata, Sri Lanka's flagship telecommunications company, established a joint venture with Firstsource, a leading global BPO services provider. **Firstsource Dialog Solutions** serves local BPO clientele and runs Dialog's customer contact management operations.

Investment research, financial analytics, and accounting

- **Amba Research**, ranked number one in the capital markets research and analytics offshoring space by the Black Book of Outsourcing, established its first delivery center in Colombo in 2003. The firm provides equity, fixed-income and credit research, quantitative research, corporate finance index support, sales and marketing, and compliance services to many of the world's leading asset managers, investment banks, and hedge funds.

- **Stax Inc.** is a global strategy consulting firm with offices in the United States and Sri Lanka. The Colombo branch advises local and regional companies on acquiring private equity funds and expanding into the U.S., European, and Australian markets and supports other Stax teams with sophisticated data analytics and complex survey administration.

Legal services

- **LegalBase** provides legal services ranging from document review to sophisticated transactional advisory services to clients in countries as diverse as Norway and the Maldives. Clients include small businesses, law firms, global consumer companies such as Dilmah, Red Bull, and the Virgin Group, and boutique private equity houses. The International Association of Outsourcing Professionals ranked it one of the world's five best legal outsourcing providers.

- **WNS** negotiates and processes complex personal injury claims on behalf of one of the United Kingdom's leading solicitor firms.

IT services and solutions

- NASDAQ-listed **Virtusa Corporation** has operated in Colombo since 1995. The company provides IT services to leading Global 1,000 customers in financial services, insurance, telecommunications, healthcare, and capital markets.

- **IFS**, the Sweden-based enterprise applications company, has more than 800 employees in Colombo and Kandy and will grow to 1,000 by year end, making Sri Lanka one of IFS's largest support and development centers. IFS Sri Lanka provides enterprise asset management solutions to public and private clients in the aerospace and defense, oil and gas, food and beverage, and process industries, including DuPont, Pepsi, and the U.K. Royal Navy.

- **24/7 Techies** provides infrastructure outsourcing and support for cloud-based applications, with a focus on

small- and medium-size app developers and enterprises in the United States.

- **99X Technology** is a leading supplier of product engineering services to independent software vendors and has built more than 100 products, mainly for the Scandinavian market.

- **MAS**, a Sri Lankan company that provides design-to-delivery solutions in intimate apparel and sportswear, is leveraging its manufacturing experience to develop IT services. Its subsidiary **Attune**, the first global SAP solution provider to focus wholly on the apparel and footwear industry, provides consulting, software license sales, and customer support to clients such as Benetton, Burberry, Hanes, and Tommy Hilfiger. Another subsidiary, **TradeCard Services** (a joint venture with TradeCard Inc.), is a supply chain collaboration platform for brands, retailers, and their trade partners. Trading partners from 78 countries connect and transact on TradeCard's cloud-based network to facilitate global trade and supply chain transactions, improving their margins, cash flow, and visibility.

- **Bileeta** has developed an ERP system that is easily customizable to accommodate local business requirements. Their highly scalable and cost-effective solution carries the key modules to support sales and distribution, manufacturing, projects, and services.

- **Creative Solutions** provides software development, support, and quality assurance services to international software companies and employs more than 350 software engineering professionals. More than 100 Creative Solutions resources are dedicated to the

development and support of applications using Microsoft SharePoint.

IT research and development

- **Motorola Solutions** operates one of its global R&D centers in Sri Lanka, where it focuses on the development of embedded software for its enterprise devices.

- **Zone24x7** provides enterprise-grade software, hardware designs, and specialist device-management solutions to leading technology vendors, retailers, and banks, including Fortune 500 companies.

IT products

- **WSO2** supplies the 100 percent open-source enterprise service bus used by eBay. Other globally recognized clients include the BBC, BP, Fidelity Investments, Kaiser Permanente, Lockheed Martin, the U.S. Army, and Volvo.

- Colombo-based **Millennium IT** delivers trading, order routing, surveillance, and depository solutions to many of the world's leading stock exchanges, broker-dealers, and regulators. The company is a wholly owned subsidiary of the London Stock Exchange Group.

- **hSenid** is a global human resources (HR) and telecommunications software solutions provider specializing in on-premise HR applications, cloud HR solutions, HR outsourcing, and mobile platform solutions. Established in 1997, hSenid deploys solutions in 24 countries and 18 industries.

- Sri Lankan IT firms deliver software and services to some of the world's leading airlines. JKCS, the IT arm of Sri Lanka's largest company, **John Keells**, has operated a dedicated offshore software development

center serving Emirates, Kingfisher, Qatar Airways, and SAS for 15 years. Several international airlines, hotel companies, and tour operators use its multi-channel Internet booking engine and hotel management solution.

- **Affno**, a local company, designed the eGovernment mobile portal for Bahrain, boosting the country to number one in the Middle East and 13 globally in the United Nations governance rankings. A number of local firms have also designed and implemented eGovernment solutions in Sri Lanka, dramatically improving services and reducing costs for a range of citizen services, including passports, drivers' licenses, birth certificates, and census data.

- Colombo-based **Aeturnum Lanka**, a subsidiary of Aeturnum Inc., provides product engineering, implementation, and integration services to global technology companies. Aeturnum was one of only six Microsoft partners worldwide to be recognized at the 2011 Microsoft SharePoint Conference, winning the FAST Innovative Solution Award for its pioneering work in enhancing enterprise content search and ability to drive innovation.

- Based in Colombo, **Microimage** designs software products in the areas of human capital management, broadcast automation for the media industry, and mobile applications. Clients include Aviva, Dialog Axiata, Etisalat, and HSBC.

- Several Sri Lankan companies deliver software and services to global telecom companies including Alcatel Lucent, British Telecom, Ericsson, Mobitel, Safaricom, and Singapore Mobile One.

Key Findings: Financial Attractiveness

Although the quality of the skill base and the overall business environment may be the key drivers of long-term location decisions, cost remains a critical factor for companies choosing where to locate or outsource their service operations. In spite of Sri Lanka's well-educated labor force and solid infrastructure, it scores extremely well in the financial attractiveness category.
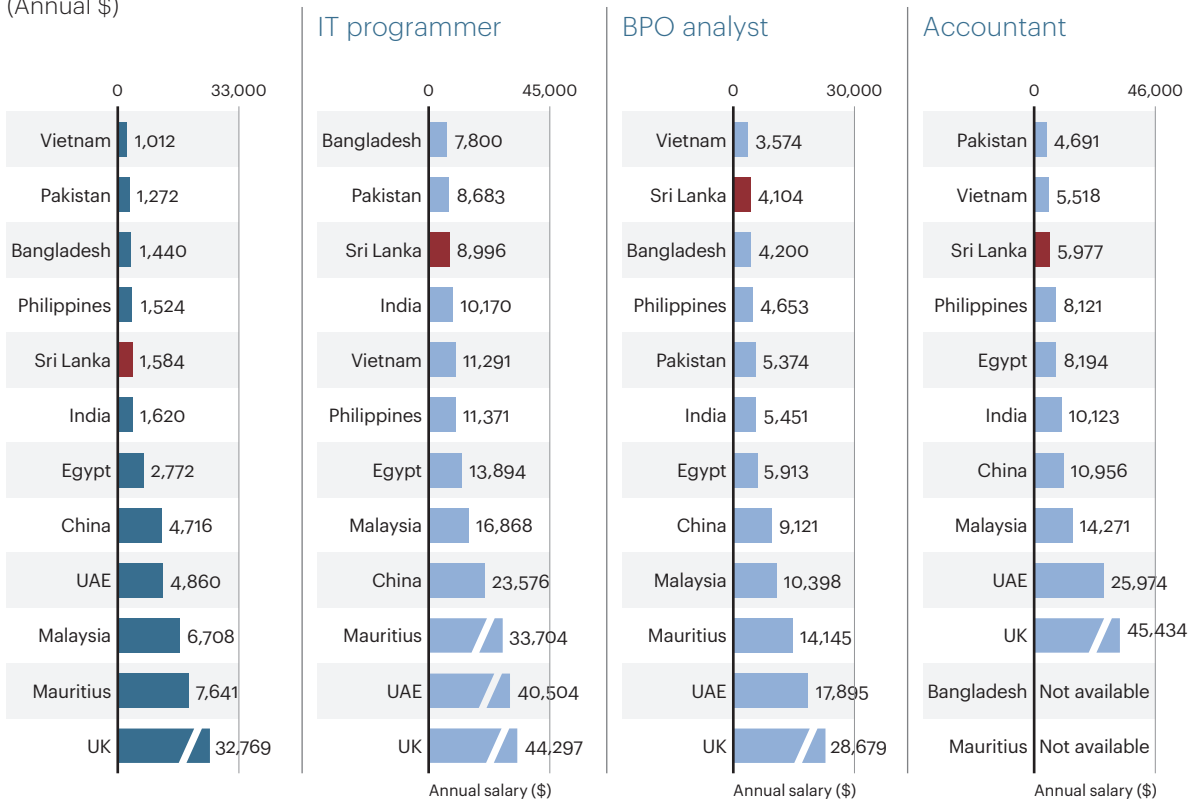
Compensation costs

In the compensation cost category, the Index looks at average wages across the economy as a whole, and typical compensation costs for representative positions in the IT, BPO, and KPO industry. The average wages metric is a useful indicator of overall wage pressures in the economy, regardless of short-term spikes and dips in IT/BPO industry compensation driven by demand and supply conditions.

Average wages in Sri Lanka, at around $1,500 per year, are in the same range as Bangladesh, India, and the Philippines (see figure 4). Vietnam and Pakistan are the only countries with signifcantly lower wages.

Figure 4
Compensation costs[1]

National average wages
(Annual $)

| | IT programmer | BPO analyst | Accountant |

National average wages (0–33,000)	IT programmer (0–45,000)	BPO analyst (0–30,000)	Accountant (0–46,000)
Vietnam — 1,012	Bangladesh — 7,800	Vietnam — 3,574	Pakistan — 4,691
Pakistan — 1,272	Pakistan — 8,683	Sri Lanka — 4,104	Vietnam — 5,518
Bangladesh — 1,440	Sri Lanka — 8,996	Bangladesh — 4,200	Sri Lanka — 5,977
Philippines — 1,524	India — 10,170	Philippines — 4,653	Philippines — 8,121
Sri Lanka — 1,584	Vietnam — 11,291	Pakistan — 5,374	Egypt — 8,194
India — 1,620	Philippines — 11,371	India — 5,451	India — 10,123
Egypt — 2,772	Egypt — 13,894	Egypt — 5,913	China — 10,956
China — 4,716	Malaysia — 16,868	China — 9,121	Malaysia — 14,271
UAE — 4,860	China — 23,576	Malaysia — 10,398	UAE — 25,974
Malaysia — 6,708	Mauritius — 33,704	Mauritius — 14,145	UK — 45,434
Mauritius — 7,641	UAE — 40,504	UAE — 17,895	Bangladesh — Not available
UK — 32,769	UK — 44,297	UK — 28,679	Mauritius — Not available
	Annual salary ($)	Annual salary ($)	Annual salary ($)

[1] Compensation includes base salary plus benefits, tax, and bonus; estimates are used when data is not available; salaries do not reflect fully loaded seat costs; accountant salaries not available for Bangladesh and Mauritius.

Note: BPO is business process outsourcing.

Sources: Economist Intelligence Unit 2011, Mercer HR Consulting 2011, Watson Towers 2011; A.T. Kearney analysis

Relative compensation costs for specific positions in the knowledge services industry are largely consistent with relative average wages across each of the countries. In general, only Vietnam and Pakistan offer lower compensation costs than Sri Lanka. According to surveys conducted by third-party compensation consultants, fully loaded compensation costs in Sri Lanka (including benefits, bonuses, and taxes) are at least 10 percent lower than India for an IT programmer with two to three years of experience, 20 percent lower for a BPO analyst, and 40 percent lower for an experienced accountant.

Sri Lanka's knowledge services industry has not experienced the same demand as other countries—**resulting in lower wages and less attrition.**

Interviews with executives of several companies that have operations in both India and Sri Lanka confirm these numbers. These firms consistently report that salaries for equivalent positions are around 20 percent cheaper in Sri Lanka, even compared to tier II cities in India such as Visakhapatnam.

Sri Lanka's knowledge services industry has not experienced the same demand growth as India, the Philippines, and other countries, resulting not only in lower wages but also in less attrition. In interviews, executives consistently report that their attrition rates in Sri Lanka are less than 20 percent, whereas rates in India and the Philippines range from 20 to 25 percent in the IT sector and 30 to 35 percent in the BPO sector. Most attrition at this stage is caused not by movement between industry players but by people leveraging their experience to seek higher education or to pursue opportunities in other countries.
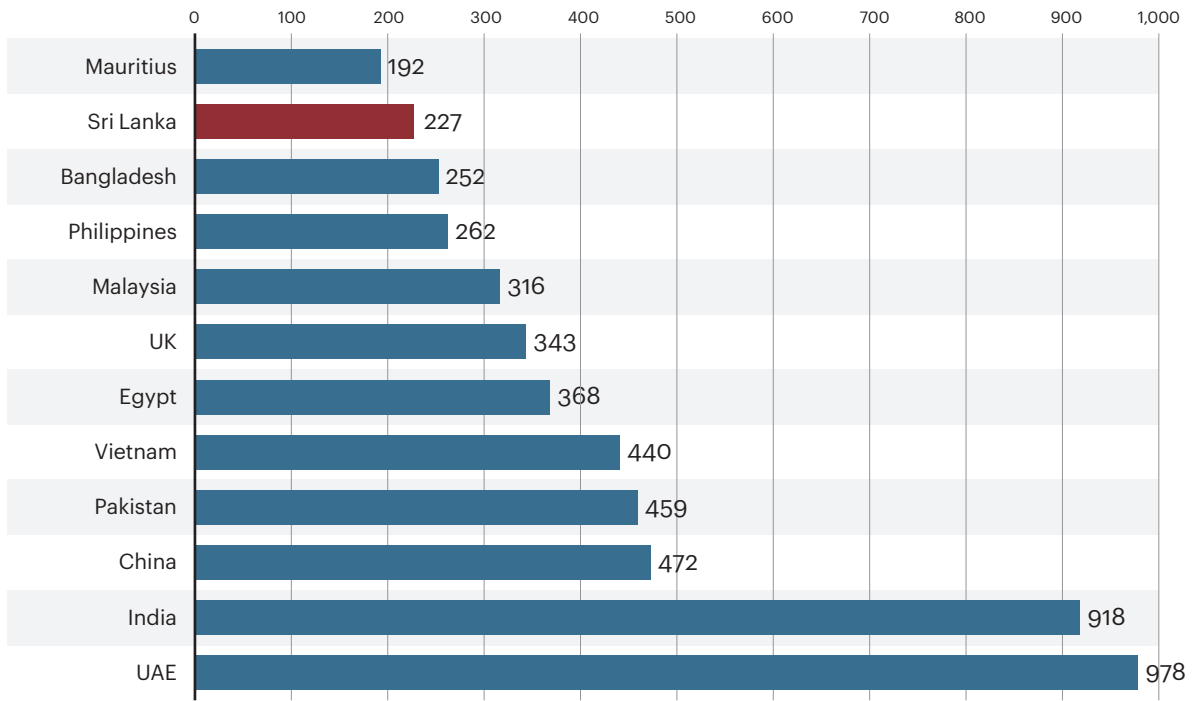
Infrastructure costs

After compensation costs, the main cost driver for any offshore center is real estate. At an average of $227 per square meter, rental rates for Class A real estate in Colombo, Sri Lanka's largest city, are the lowest among all the benchmark countries, except Mauritius (see figure 5 on page 12). Average rent for top-end office space in Colombo is up to 30 percent less than in Kuala Lumpur or Cairo and at least 50 percent less than equivalent space in Guangzhou or Bangalore. While IT/BPO centers are frequently located in less prestigious facilities in many countries, for the purposes of this report, we use Class A real estate because of the availability of internationally comparable data. In Colombo, given the still low rates, several BPO companies are in fact housed in Class A locations, including the World Trade Center, probably the best commercial real estate in the country. In addition, Class B real estate in Colombo is often easier to come by and of better quality than in many emerging market capitals, where the gap between Class A and more affordable real estate is often wide.

In parallel with the general real estate market, private players have created dedicated IT/BPO industry parks. One example is HSBC, which built its own 2,000-seat campus on the outskirts of Colombo. Another is Orion City, a former textile mill near the center of Colombo that has been converted into a dedicated IT/BPO industry park offering space to companies on a plug-and-play

Figure 5
Real estate cost

Cost of class A real estate in major commercial city's main business district
($ per square meter)

	0	100	200	300	400	500	600	700	800	900	1,000

Country	Value
Mauritius	192
Sri Lanka	227
Bangladesh	252
Philippines	262
Malaysia	316
UK	343
Egypt	368
Vietnam	440
Pakistan	459
China	472
India	918
UAE	978

Sources: CB Richard Ellis 2011; A.T. Kearney analysis

basis. Global IT companies MphasiS and Virtusa have set up shop there, along with U.K. publisher and education company Pearson, Sri Lankan Airlines' customer service center, and other smaller companies.

After compensation and real estate, electricity and telecommunications are the other primary drivers of costs for IT and BPO operations. Electricity costs in Sri Lanka are relatively high but are in the same general range as in India, the Philippines, and the United Kingdom. More importantly, because electricity rates in Sri Lanka are set at an amount that enables the national electricity company to recover costs and reinvest in new generation capacity, the availability and reliability of electricity supply tends to be much higher in Sri Lanka than in other emerging markets. According to the World Economic Forum Global Competitiveness Report, electricity supply quality is rated far higher in Sri Lanka than in other low-cost countries in South Asia and Southeast Asia (see figure 6 on page 13). As a result, IT and BPO operators have to spend less on emergency backup infrastructure and fuel supply.
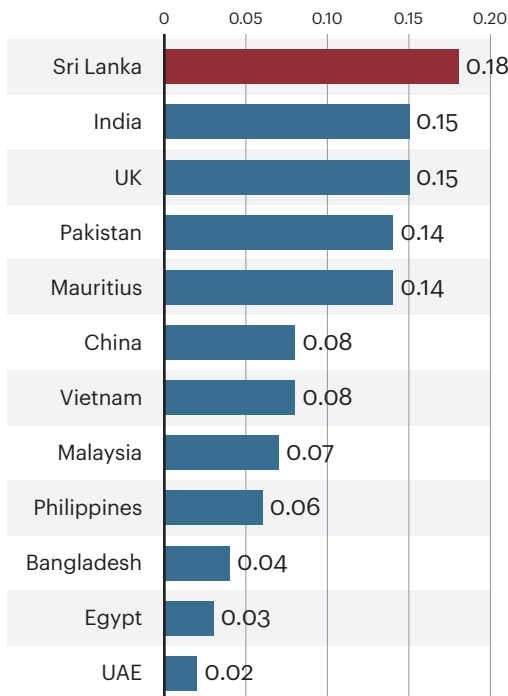
As a whole, telecom costs in Sri Lanka are very competitive. Like most emerging markets, multiple telecom companies are now competing to provide service, and standard rates for local and international calls are much lower than in developed countries. (It costs just a few cents per minute for most calls to Europe, India, and the United States.) However, because of the limited choice of international gateways and limited competition in the wholesale market, rates for
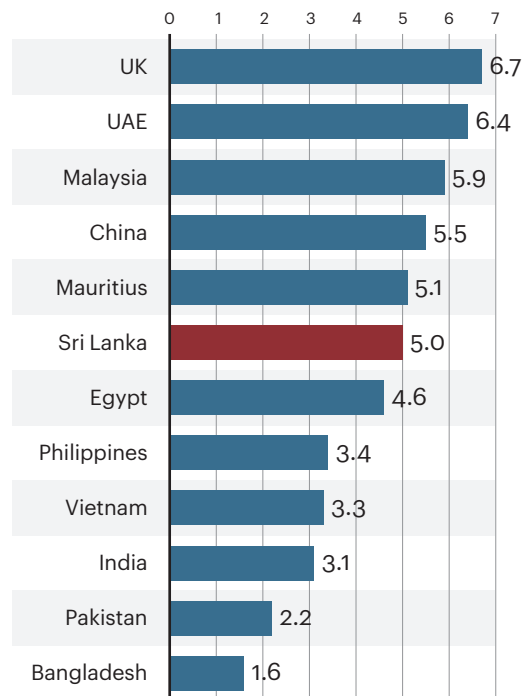
Figure 6
Electricity cost and quality

Electricity cost
($ per kilowatt hour)

Sri Lanka	0.18
India	0.15
UK	0.15
Pakistan	0.14
Mauritius	0.14
China	0.08
Vietnam	0.08
Malaysia	0.07
Philippines	0.06
Bangladesh	0.04
Egypt	0.03
UAE	0.02

Electricity quality[1]
Scale: 1 = worse than most countries, 7 = meets highest standards

UK	6.7
UAE	6.4
Malaysia	5.9
China	5.5
Mauritius	5.1
Sri Lanka	5.0
Egypt	4.6
Philippines	3.4
Vietnam	3.3
India	3.1
Pakistan	2.2
Bangladesh	1.6

[1] Quality refers to electricity supply, specifically in perceived number of interruptions and voltage fluctuations.

Sources: International Energy Agency 2009–2010, International Telecommunications Union 2011, Telecommunications Regulatory Commission of Sri Lanka 2011; A.T. Kearney analysis

dedicated international leased lines tend to be much higher than in other competing countries. As of 2011, a 2 megabits per second (mbps) international leased line cost more than $2,000 per year in Sri Lanka, versus $600 to $1,000 in other countries in South Asia.

A draft of a new national broadband policy has just been completed and is due to be finalized within the next few months. This policy is expected to introduce increased competition, particularly in terms of landing stations, and directives to bring international bandwidth costs in line with neighboring countries. International bandwidth costs in other countries, such as Bangladesh and India, dropped dramatically after the introduction of competition and price guidelines for dominant operators.

Tax and regulatory costs

In the last two budgets, the government has taken significant steps to streamline the tax system by eliminating several minor taxes and levies and reducing corporate income tax rates and value-added tax rates. As of April 2011, the standard corporate income tax rate is 28 percent, down from 35 percent.

Moreover, the government offers generous incentives for IT and BPO companies; these incentives reduce the tax rate to zero percent for most investors. The corporate tax rate for all exporting

companies has been reduced to 12 percent, and new undertakings with investments in excess of $250,000 are eligible for a four-year tax holiday, while investments in excess of $2 million are eligible for additional tax-free years.

Key Findings: People Skills and Availability

While Sri Lanka's small population makes it a complement rather than a competitor to countries such as India, its highly skilled workforce is its major asset.

Talent pool: overall size of the workforce and IT/BPO sector

With a population of 20 million and a workforce of 9 million, Sri Lanka offers a relatively small talent base compared to most competing countries. Of the 12 countries included in our benchmark sample, only Mauritius and the UAE have smaller workforces. However, many of the countries that have proven most successful as knowledge services locations have even smaller populations; notable examples include Chile, Costa Rica, Ireland, Israel, Singapore, and most of the countries in Eastern Europe. Malaysia has established itself as a major global services center while offering a workforce only marginally larger than that of Sri Lanka.

According to the latest National ICT Workforce Survey, the number of Sri Lankans holding IT or BPO jobs has almost doubled from 34,000 in 2006 to 63,000 in 2011. The national goal is to increase direct employment in the sector to 100,000 in the next five years. The govern-ment has launched programs to increase the number of graduates in relevant disciplines and to encourage private institutions to expand the availability of non-degree diploma programs and online learning courses. The ICTA, along with industry associations, is running awareness campaigns on social media such as Twitter and Facebook to attract more young talent. The Sri Lanka Association for Software and Service Companies (SLASSCOM) has dedicated a subcommittee to promoting IT/BPO as a career choice and is running competitions, campus visits, and workshops at the secondary and university levels.

The government has also launched a number of programs to improve quality certification in the IT and BPO industry. The government provides substantial grants to support training and quality enhancements. To date, ICTA has helped more than 30 companies to get certifications from the Customer Operations Performance Center (COPC) and the International Organization for Standardization (ISO), and to achieve capability maturity model integration (CMMi) compliance.

Future talent pool: graduation rates

Sri Lanka has 23 accredited universities and numerous private higher education institutes offering full degree programs. The total number of students enrolled in higher education now exceeds 400,000, with almost 100,000 students graduating per year. Most graduates have degrees in disciplines relevant to the knowledge services industry, including computer sciences, finance, commerce, law, medicine, architecture, and engineering. More than 5,500 graduates with IT-related degrees and post-graduate degrees are now joining the workforce each year. In addition, more than 25 private educational institutes offer diplomas in IT, and tertiary and vocational education institutes around the country offer preliminary IT training courses.

The government has recently pushed through reforms that enable private institutions and foreign entities to establish fully accredited universities in Sri Lanka. A number of private universities are scheduled to become accredited in 2012, helping to relieve space constraints at public
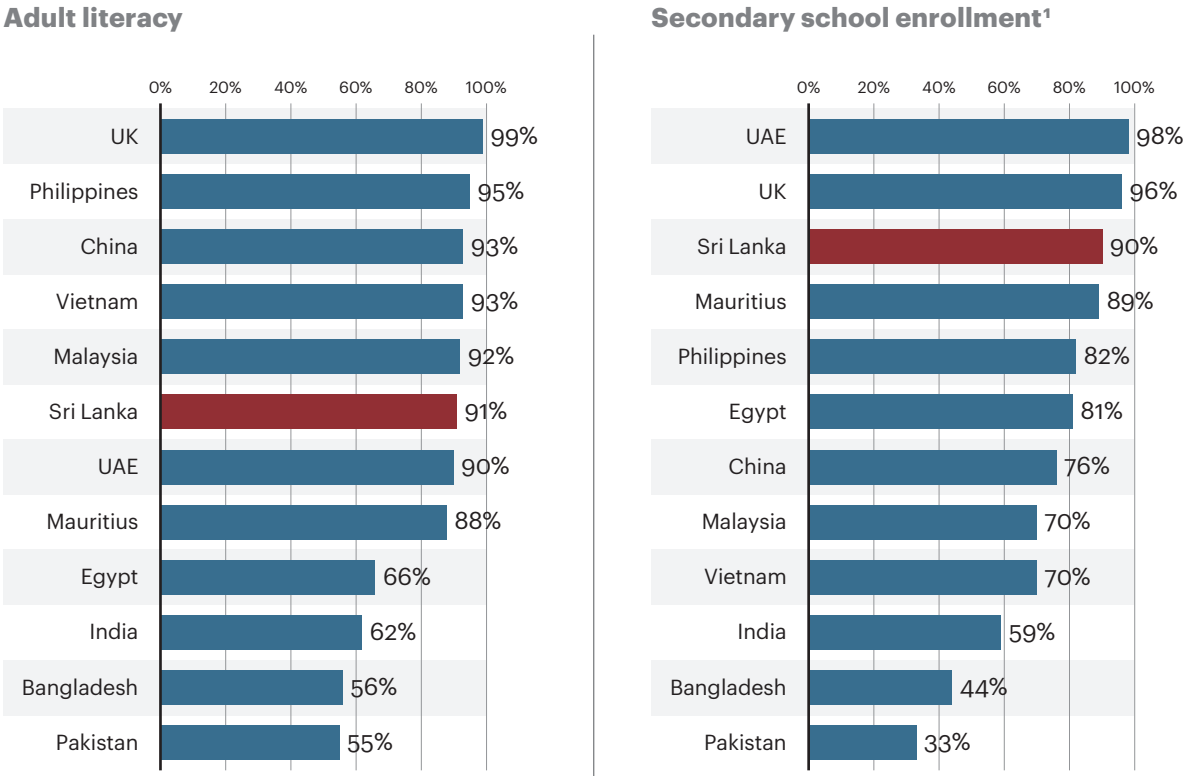
universities and open up higher education to a much broader section of the population. Foreign universities such as Curtin University of Technology in Australia, Monash University in Australia, the University of British Columbia in Canada, the University of Wales in the United Kingdom, and Uppsala University in Sweden are partnering with local institutions to offer degree programs, and some are investigating the possibility of setting up their own campuses in Sri Lanka.

Education quality

Since colonial times, Sri Lanka has excelled in education quality compared to other developing countries. With free primary and secondary education in place since 1938 and an extensive university system, Sri Lanka's education systems are top level. Sri Lanka's literacy rate has exceeded 85 percent for more than 30 years and is currently 91 percent, while literacy levels in most countries in South Asia have been lower than 60 percent until quite recently. Sri Lanka still has the highest secondary school enrollment rate among developing countries in the benchmark group, and it ranks number one in South Asia on the United Nations Human Development Index (see figure 7).

The government has also launched programs to increase IT usage and literacy in schools. These include initiatives to complete the installation of IT labs in every primary and secondary school within the next three years and develop IT-enabled content and curricula. Primary- and

Figure 7
Literacy and enrollment rates

Adult literacy

Country	Rate
UK	99%
Philippines	95%
China	93%
Vietnam	93%
Malaysia	92%
Sri Lanka	91%
UAE	90%
Mauritius	88%
Egypt	66%
India	62%
Bangladesh	56%
Pakistan	55%

Secondary school enrollment[1]

Country	Rate
UAE	98%
UK	96%
Sri Lanka	90%
Mauritius	89%
Philippines	82%
Egypt	81%
China	76%
Malaysia	70%
Vietnam	70%
India	59%
Bangladesh	44%
Pakistan	33%

[1] Secondary school enrollment refers to gross enrollment rates measuring total enrollment in a specific level of education as a percentage of the total population corresponding to the relevant age group. These percentages represent a country's capacity to accommodate its school-age population for given levels of education.

Sources: United Nations Educational, Scientific, and Cultural Organization 2011; A.T. Kearney analysis

secondary-school students in Sri Lanka attend IT skill courses conducted by the government and private education organizations in parallel with their school curriculum. Already, overall national IT literacy levels have risen from 8 percent in 2002 to 32 percent in 2011. The government aims to achieve 75 percent IT literacy levels by 2015 and is training 50,000 teachers to meet this target. Multinational companies, including Intel and Microsoft, are involved in efforts to prepare teachers and supply relevant content, software, and Internet connectivity to widen the country's technology footprint and skill base.

At the tertiary level, executives rank Sri Lanka's management schools among the best in Asia, behind only Malaysia and India. Executives also rank Sri Lanka's math and science programs highly, behind Malaysia, UAE, India, and China (see figure 8).
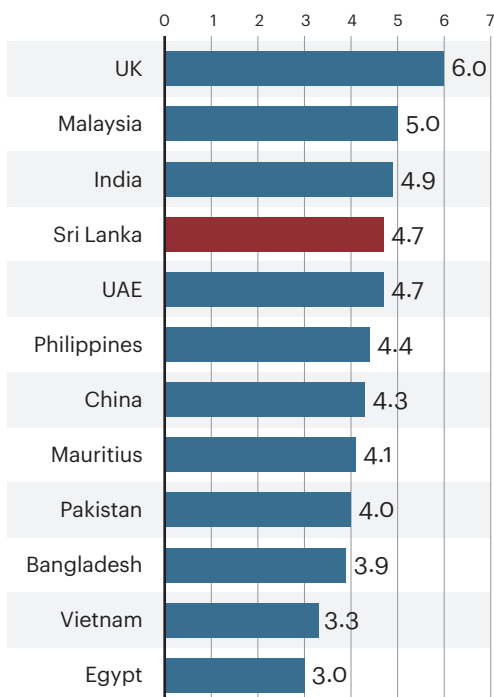
Students from Sri Lanka's universities frequently perform well in international IT competitions. In 2007, 2008, and 2009, the University of Moratuwa ranked first worldwide in terms of students receiving awards for free and open-source software development at the annual Google Summer of Code competitions, and it now holds the most cumulative awards. Of 595 participating universities, the university had the highest number of students accepted into the program in 2011.

Beyond the quantifiable and tangible people skills, Sri Lanka's competitive advantage also lies in its softer people skills. Coming from a small island with a cultural melting pot history, Sri Lankans are particularly open to people and ideas from around the world. As reported
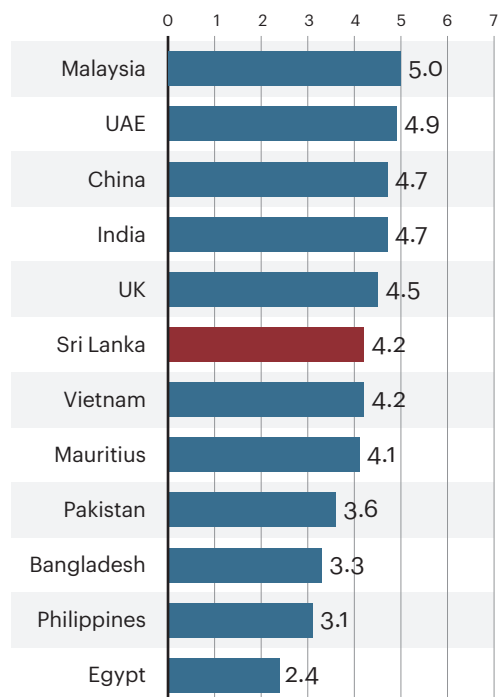
Figure 8
Quality of education

Management schools
Scale: 1 = far behind other countries, 7 = among the best in the world

UK	6.0
Malaysia	5.0
India	4.9
Sri Lanka	4.7
UAE	4.7
Philippines	4.4
China	4.3
Mauritius	4.1
Pakistan	4.0
Bangladesh	3.9
Vietnam	3.3
Egypt	3.0

Math and science
Scale: 1 = far behind other countries, 7 = among the best in the world

Malaysia	5.0
UAE	4.9
China	4.7
India	4.7
UK	4.5
Sri Lanka	4.2
Vietnam	4.2
Mauritius	4.1
Pakistan	3.6
Bangladesh	3.3
Philippines	3.1
Egypt	2.4

Sources: World Economic Forum Global Competitiveness Report 2011–2012; A.T. Kearney analysis

by executives with operations in multiple countries, Sri Lankan workers' friendliness, creativity, and adaptability to different cultures and environments result in easy integration into foreign operating units. In addition, they are known to be strong program and relationship managers and are able to handle complex, differentiated tasks rather than just rote processes.

Language skills

International language skills are critical for global IT and BPO countries. Nearly two million Sri Lankans speak English, which has been taught widely as the result of British colonial rule and is the main language used by the business community. The country produces close to 400,000 English-speaking, IT-literate individuals each year.

Sri Lankan **workers' friendliness, creativity, and adaptability to different cultures** and environments result in easy integration into foreign operating units.

Moreover, thanks to more than three decades as a popular tourism destination, Sri Lankans have learned a variety of languages, including European languages such as French, German, Italian, and Spanish, as well as Japanese and Chinese. Korean is also taught on the island because many aspire to work in Korea for part of their careers.

With its unique combination of linguistic skills and professional qualifications, Sri Lanka offers companies the opportunity to deliver high-end finance, accounting, legal, and other services in multiple languages.

Key Findings: Business Environment

Country risk

Contrary to the image created by the long-running conflict, overall business operations risk and specific terrorism risk in Sri Lanka are lower than in most of the benchmark countries. Sri Lanka's overall business operations risk profile is considered to be superior to India, Bangladesh, Pakistan, Philippines, and Vietnam, according to the Economist Intelligence Unit.

Since the end of the war nearly three years ago, the U.S. Department of State has recorded no terrorism-related deaths in Sri Lanka, unlike the majority of other countries. According to the Global Competitiveness Report, the business cost of terrorism in Sri Lanka is judged to be lower than most of the countries in the benchmark set; only the UAE, Mauritius, and Malaysia received better scores (see figure 9 on page 18).
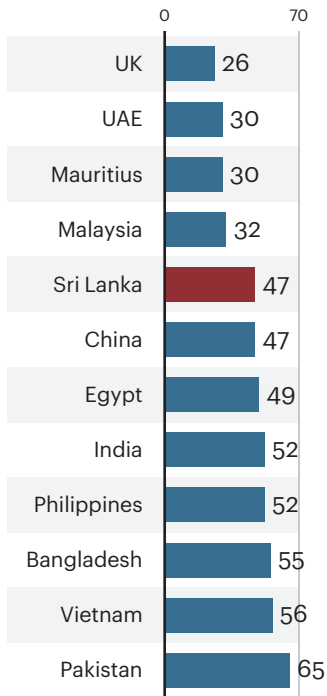
Anecdotal evidence supports these scores: Companies with operations in Sri Lanka and other countries in the region report that they have never had to stop operations in Sri Lanka, whereas they have suffered disruptions in most other locations because of industrial disputes, natural disasters, and terrorist attacks.
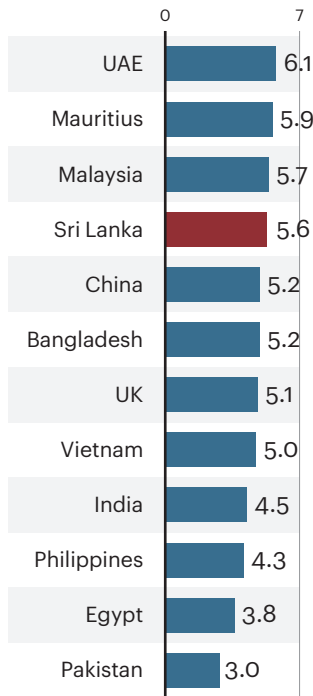
Figure 9
Business and terrorism risk
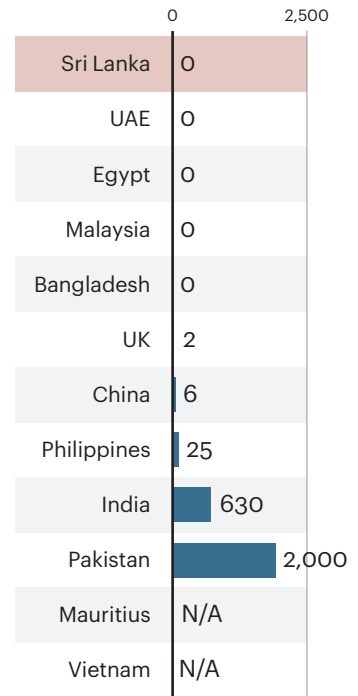
Business operations risk
Scale: 100 = most risk

UK	26
UAE	30
Mauritius	30
Malaysia	32
Sri Lanka	47
China	47
Egypt	49
India	52
Philippines	52
Bangladesh	55
Vietnam	56
Pakistan	65

Business cost of terrorism
Scale: 1 = high cost, 7 = no cost

UAE	6.1
Mauritius	5.9
Malaysia	5.7
Sri Lanka	5.6
China	5.2
Bangladesh	5.2
UK	5.1
Vietnam	5.0
India	4.5
Philippines	4.3
Egypt	3.8
Pakistan	3.0

Fatalities in 2010

Sri Lanka	0
UAE	0
Egypt	0
Malaysia	0
Bangladesh	0
UK	2
China	6
Philippines	25
India	630
Pakistan	2,000
Mauritius	N/A
Vietnam	N/A

Sources: Economist Intelligence Unit 2012, World Economic Forum Global Competitiveness Report 2011–2012, U.S. Department of State 2010; A.T. Kearney analysis

Another indicator of Sri Lanka's relative security and low-risk profile is the rebound of the tourism industry since the end of the separatist conflict. The number of international visitors to Sri Lanka grew by more than 50 percent from 2009 to 2010, and the data for 2011 is expected to show similar growth rates. The government's target is to attract 2.5 million tourists by 2016. As a result, top hotel chains such as Marriott, Shangri-La, and Starwood have joined Hilton, Ramada, and Taj in announcing plans for new properties in Sri Lanka. The Sri Lanka Tourist Board has launched resort development projects at Dedduwa, Kalpitia, Kuchchavelli, and Passikudah to channel investment and improve local tourism-related infrastructure and supply chains while preserving the country's abundant wildlife and lush scenery. In 2010, *The New York Times* ranked Sri Lanka as the world's number-one travel destination; and in 2011, *National Geographic Traveler* named it one of the top six places to visit in 2012, citing its hill country, pristine beaches, and heritage sites.

Economic stability

Economic growth and foreign direct investment (FDI) are good indicators of overall stability and business confidence in a country. Sri Lankan gross domestic product (GDP) has grown consistently over the past decade, even through the global recession. Sri Lanka's GDP growth rate has been among the highest in the world over the past two years (see figure 10 on page 20).

For 30 years, Sri Lanka's otherwise favorable environment was held back by uncertainty related to the conflict. Since the conflict ended in 2009, investors have shown renewed interest, and the Sri Lankans who dispersed during the conflict have started to return in higher numbers than before. Conflict was primarily centered in the northern and eastern provinces. Now, Jaffna, a traditional center of learning, and other towns in the north and east are being reintegrated into the Sri Lankan economy with commercial and infrastructure links.

Sri Lanka aims to achieve **75 percent IT literacy levels by 2015** and is training 50,000 teachers to meet this target.

Even during the conflict, investment continued to flow into Sri Lanka. Over the past decade, Sri Lanka attracted $4 billion in FDI inflows, twice what it attracted in the three preceding decades, also shown in figure 10. While FDI inflows suffered as a result of the global downturn in 2009, they have recovered quickly and are expected to have reached record levels in 2011. Recent sovereign bond issues have also been heavily oversubscribed, reflecting investor confidence.

Infrastructure

Sri Lanka's infrastructure is generally far superior to that found in other low-cost countries (see figure 11 on page 20). Being a relatively small capital city, Colombo has far less congestion and pollution than most other fast-growing capitals. Moving within the city is much easier than in Cairo, Dhaka, Manila, or Mumbai; and the country is expanding and improving links between cities as well. The first section of a new national highway has been completed from Colombo to the south coast and will eventually extend to Hambantota, where a new port, international airport, IT park, and other facilities are nearing completion. The government has announced plans to construct additional expressways linking Colombo to Jaffna and Trincomalee in the north and east and to Kandy in the center of the island.

Sri Lanka has extensive international air links. More than 20 international airlines operate out of Bandaranaike International Airport. The airport offers more flights to India than any other country—more than 140 flights per week. Most Indian cities are less than two hours away, which is a major advantage for companies with investments in the region.
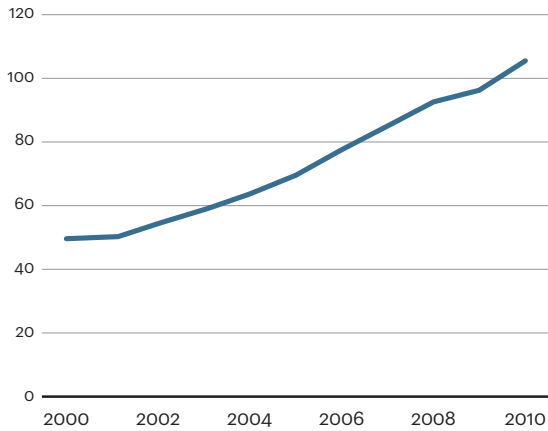
Sri Lanka's telecommunications quality and sophistication is also comparable to other countries in the region. The country has nine telecom operators (four fixed line and five mobile), 33 external gateway operators, 22 Internet service providers, and four international submarine cables. Broadband, leased-line, and satellite connectivity are available, and Sri Lanka was among the first South Asian countries to establish 3G and 4G technology.

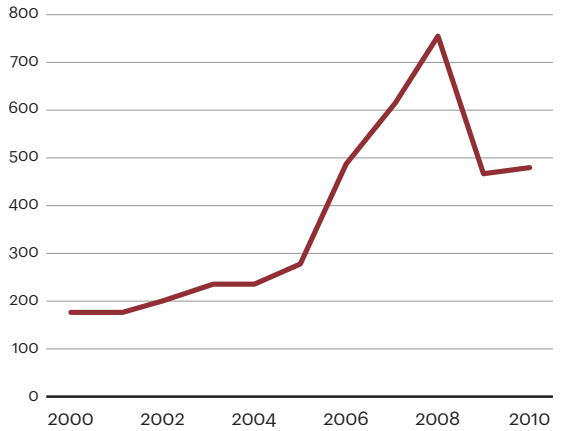## Figure 10
Macroeconomic indicators

Sri Lanka GDP, 2000-2010
($ billions PPP)

Sri Lanka FDI inflows, 2000-2010
($ millions)

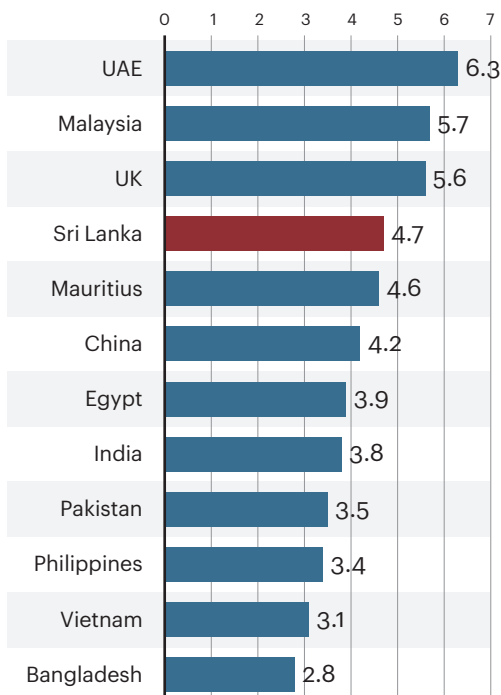Notes: GDP is gross domestic product; PPP is purchasing power parity; FDI is foreign direct investment.

Sources: Economist Intelligence Unit 2011, United Nations Conference on Trade and Development 2011; A.T. Kearney analysis

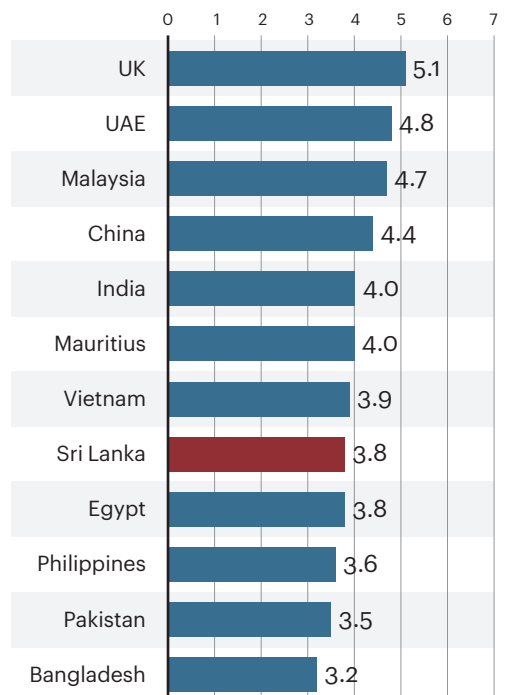## Figure 11
Infrastructure quality

Overall infrastructure
Scale: 1 = underdeveloped, 7 = efficient by international standards

Country	Value
UAE	6.3
Malaysia	5.7
UK	5.6
Sri Lanka	4.7
Mauritius	4.6
China	4.2
Egypt	3.9
India	3.8
Pakistan	3.5
Philippines	3.4
Vietnam	3.1
Bangladesh	2.8

Network readiness
Scale: 1 = underdeveloped, 7 = efficient by international standards

Country	Value
UK	5.1
UAE	4.8
Malaysia	4.7
China	4.4
India	4.0
Mauritius	4.0
Vietnam	3.9
Sri Lanka	3.8
Egypt	3.8
Philippines	3.6
Pakistan	3.5
Bangladesh	3.2

Sources: World Economic Forum Global Competitiveness Report 2011–2012, World Economic Forum Global Information
Technology Report 2010–2011; A.T. Kearney analysis

Regulatory environment

Precisely because of the conflict, the government took great pains to make the business climate welcoming to foreign investors. Sri Lanka instituted economic reforms in the 1970s and has followed a pro-business and pro-investment policy ever since. The country allows 100 percent foreign ownership in almost all sectors and places no restrictions on repatriation of earnings, fees, or capital. As a result, its regulatory environment is ranked well above that of neighboring India and Bangladesh (see figure 12).

Sri Lanka's relatively positive regulatory environment is reflected in the country's ranking in the World Bank's Doing Business Index and Transparency International's Corruption Perception Index, above that of India and other countries in the region.
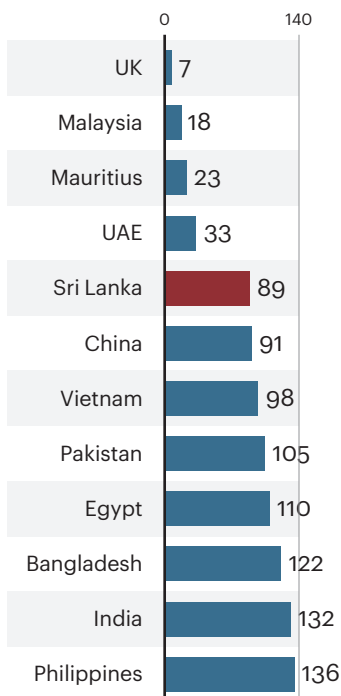
Like many countries in South Asia, Sri Lanka tends to have rather rigid labor regulations and procedures. In terms of overall flexibility in hiring, redundancy, and working hours, Sri Lanka scores slightly better than the rest of the subcontinent and several Southeast Asian competitors (see figure 13 on page 22). Yet, Sri Lanka still lags far behind global best practices. Companies in the IT and BPO sector with 24/7 operations have obtained exemptions from regulations restricting aspects such as holiday work and shift work, but wider reforms to bring more flexibility to labor practices will be necessary if Sri Lanka is to compete with countries such as Malaysia, Mauritius, and Singapore.

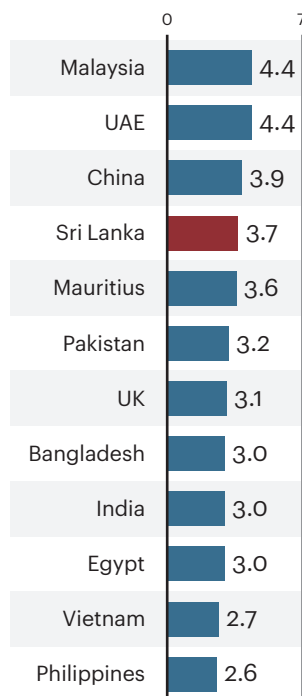Figure 12
Business environment

Ease of doing business
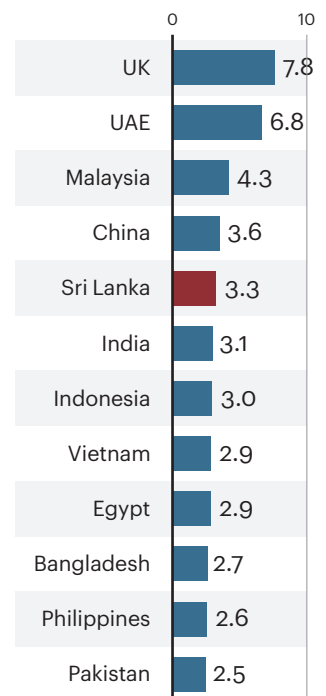World Bank study of 183 countries (1 = best)

Country	Ranking
UK	7
Malaysia	18
Mauritius	23
UAE	33
Sri Lanka	89
China	91
Vietnam	98
Pakistan	105
Egypt	110
Bangladesh	122
India	132
Philippines	136

Regulatory burden[1]
Scale: 1 = very burdensome, 7 = no burden

Country	Score
Malaysia	4.4
UAE	4.4
China	3.9
Sri Lanka	3.7
Mauritius	3.6
Pakistan	3.2
UK	3.1
Bangladesh	3.0
India	3.0
Egypt	3.0
Vietnam	2.7
Philippines	2.6

Corruption perception
Scale: 1= very corrupt, 10 = not at all corrupt

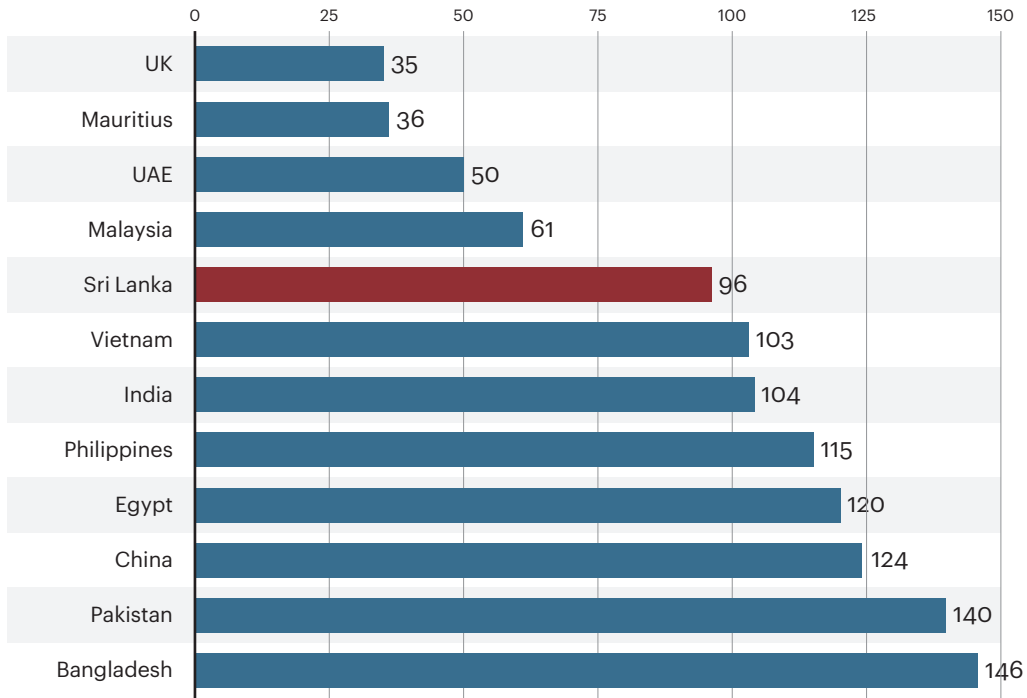| Country	Score
UK	7.8
UAE	6.8
Malaysia	4.3
China	3.6
Sri Lanka	3.3
India	3.1
Indonesia	3.0
Vietnam	2.9
Egypt	2.9
Bangladesh	2.7
Philippines	2.6
Pakistan	2.5

[1] Refers to how difficult it is to comply with government requirements (permits, regulations, reporting).

Sources: World Economic Forum Global Competitiveness Report 2011–2012, World Bank Doing Business 2012, Transparency International 2011; A.T. Kearney analysis

Figure 13
Labor market

Labor market flexibility
World Bank ranking of 183 countries (1 = best)

Country	Ranking
UK	35
Mauritius	36
UAE	50
Malaysia	61
Sri Lanka	96
Vietnam	103
India	104
Philippines	115
Egypt	120
China	124
Pakistan	140
Bangladesh	146

Note: Flexibility refers to government regulations around hiring, redundancy, and working hours.
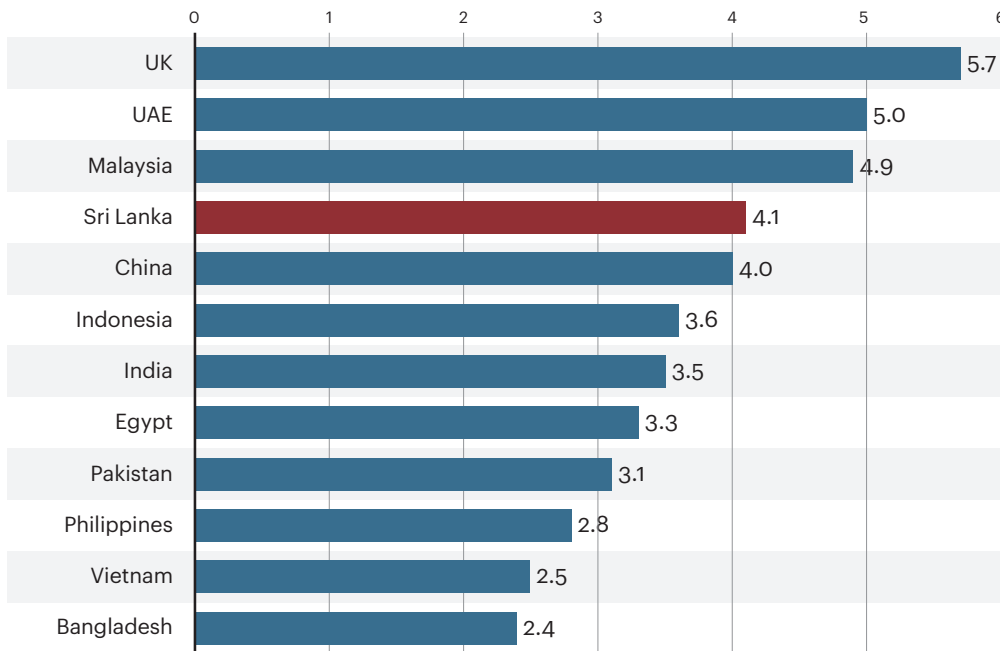Sources: World Bank Doing Business 2010; A.T. Kearney analysis

Information security

Although consumer software piracy is an issue—as in most developing countries—Sri Lanka has among the most rigorous intellectual property (IP) protection regimes in the region (see figure 14 on page 23). Industry stakeholders do not cite IP as a concern for business-to-business products, and several companies stated that they originally chose Sri Lanka over India because of a perception that information security is higher in Sri Lanka. Given the reputational risk that this issue poses for the country, Sri Lanka has created a national intellectual property rights office that focuses on awareness, policy issues, and enforcement. The country is progressing well, with the second-highest reduction worldwide in recorded software piracy rates over the past year (3 percent).

Figure 14
Intellectual property protection

Rigor of IP protection

Scale: 1 = poorly defined and not protected by law, 7 = clearly defined and well protected by law

Country	Value
UK	5.7
UAE	5.0
Malaysia	4.9
Sri Lanka	4.1
China	4.0
Indonesia	3.6
India	3.5
Egypt	3.3
Pakistan	3.1
Philippines	2.8
Vietnam	2.5
Bangladesh	2.4

Sources: World Economic Forum Global Competitiveness Report 2011–2012; A.T. Kearney analysis

A Hidden Gem

Sri Lanka is, in many ways, a hidden gem for outsourcing. It is uniquely positioned to offer companies highly skilled talent and a strong business environment at very competitive costs. As the industry grows and the lingering effects of the war recede, costs will undoubtedly rise. But Sri Lanka will undoubtedly maintain its competitive advantage as a very favorable business environment. With continued efforts to expand the talent base, reduce red tape, improve infrastructure, and establish new knowledge cities around the country, we can expect Sri Lanka to become a major player in the IT, BPO, and knowledge services industry in the next few years.

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