

GLOBAL OUTSOURCING GUIDE

In all the discussion about outsourcing, one simple fact sometimes gets lost:

Nobody beats the United States when it comes to people with IT skills. Taking into account the size and availability of the labor force, their education, relevant experience, language skills and turnover rates, A.T. Kearney ranked America tops in this area on its 2005 Global Services Location Index.

But labor arbitrage—cutting costs by exploiting the availability of lower-wage workers—remains the name of the game in IT sourcing. CIOs continue to seek savings through offshore outsourcing, and the Everest Research Institute predicts those savings will continue to drive sourcing offshore for the next 30 years. Today, 73 percent of Fortune 2000 companies say offshoring is an important part of their overall growth strategy, according to the 2005 Duke University CIBER/Archstone Consulting study. And Gartner predicts worldwide offshore spending will reach \$50 billion next year.

In this, CIO's third global outsourcing guide, we observe how the offshoring world has changed. (View previous guides at www.cio.com/archive/071504/guide.html.)

2006

Risks, rewards, challenges and opportunities, country by country

BY STEPHANIE OVERBY

The Executive Summary

India remains the leading offshore destination by a wide margin, particularly for U.S. and U.K. companies. "Every year, the risks of moving work to India get lower," says Dean Davison, VP of strategic outsourcing for Nautilus Advisors. "India is increasingly more adept at IP protection, providing resilient infrastructure and managing global relationships effectively." Although Gartner estimates that India currently holds 80 percent to 90 percent of the offshoring market, wage inflation and the increasing maturity of other low-cost areas threaten its future dominance. And as India's star has risen, so have its turnover rates—a growing concern for CIOs. Consequently, Davison expects India's market share to shrink 20 percent by 2010.

Today, less than 10 percent of American companies outsource to more than one country but "most are evaluating multiple locations," says Davison. China, for example. Experts say it could be a powerful rival to India in the next three to five years, even though it currently can't match India's large English-speaking workforce, its level of compliance with international law or its number of IT grads.

Labor and operational costs in Central European countries such as Poland, Hungary and the Czech Republic—attractive outsourcing options for Western European businesses—continue to rise, approaching the level of their customers. So penny-pinching European CIOs are looking deeper into the former Soviet bloc, to countries like Romania, Bulgaria and the Ukraine. Latin American destinations such as Costa Rica, Mexico and Brazil are beginning to attract U.S. back-office and call center work as the need to service Spanish-speaking markets grows. And A.T. Kearney suggests that the Middle East and Africa may be the next frontier for offshore operations—if the politics of the area stabilize.

Although labor costs will continue to be the driving factor behind offshoring, CIOs must internalize the "cost-versus-risk equation," says Ian Marriott, research vice president at Gartner. When going offshore, common risks (infrastructure stability, process maturity, security) become more conspicuous, and uncommon risks (human resource predictability, political stability, rule of law or lack thereof) emerge. Increased competition for the offshore outsourcing dollar promises to raise standards around the globe, but more opportunity equals more risk, and choosing a location is an increasingly complex decision—one we're hoping the "2006 Global Outsourcing Guide" will help you make.

Our Ratings ★ ⚡ ✓ \$

Leading, Challenging, Emerging and Nascent labels are based on the maturity of the industry, the size of the market, the availability and cost of skilled labor, and the infrastructure (both government support and actual technology infrastructure). *Declining* ratings were given to countries where rising costs threaten the relevance of outsourcing for labor arbitrage reasons.

Relative geopolitical risk ratings, which include political, financial and economic risk, are based on 2006 data from The PRS Group, a business information provider; low, medium and high are qualified risk ratings accurate only in comparison to other countries in this guide, not globally.

Additional information was provided by the Everest Research Institute, A.T. Kearney's 2005 Global Services Location Index, Gartner, NeOLT's "Mapping Offshore Markets Update 2005" and "Offshore and Nearshore Salary Report," Mercer's "2005 Global Pay Trends—IT Function Report," 2005 Duke University CIBER/Archstone Consulting Biannual Offshore Survey, Trestle Group's "Offshore Outsourcing Country Profiles," Datamonitor, websites of various countries' IT organizations and individual interviews.

ASIA

India

Leading ★★★★★
Average programmer salary: \$\$
Geopolitical risk: ⚡⚡
English proficiency: ✓✓✓✓

Pros: Working to stay on top, challenging Western IT integrators and consultancies for business. Has essential resources and robust infrastructure to deliver comprehensive application, infrastructure and business process services. Rakes in almost \$18 billion in IT and BPO annually. TCS, HCL Technologies, Wipro, Satyam and Infosys have all topped the billion-dollar mark and are moving up the IT value chain. Home to some of the most technologically advanced companies in the world; three out of five of the world's CMM Level 5 companies are in India. 200,000 IT grads per year.

Cons: Turnover, turnover, turnover. Even India's National Association of Software and Services Companies says it's a big problem. Turnover rates of 10% to 12% in entry-level positions, 15% to 20% in middle management; you can lose 100% of a project team overnight. Wages also on the rise. On International Intellectual Property Alliance (IIPA) priority watch list.

China

Challenging ★★★★★
Average programmer salary: \$\$
Geopolitical risk: ⚡⚡
English proficiency: ✓

Pros: Poised to take over India's top spot, growing at 25% a year since 1999. Infrastructure improving. Shanghai and Beijing well-connected; second-tier cities catching up. Business transparency increasing. Estimated 2 million Chinese software programmers right now and still growing. Good location for servicing local operations of multinationals and Chinese companies. Low-cost alternative for neighboring Japan, Korea, Taiwan, Hong Kong and Singapore.

Cons: IT services companies small and inexperienced in global business and enterprise IT. Project managers and senior-level talent scarce. English skills minimal.

Data and IP protection continues to be an issue. On IIPA priority watch list. Used mainly for low-end application development, maintenance, testing. Rising wages may dilute attractiveness.

Malaysia

Challenging ★★★★★
Average programmer salary: \$\$\$
Geopolitical risk: ⚡⚡
English proficiency: ✓✓

Pros: Ranked third on A.T. Kearney's offshoring attractiveness list. Strong governmental support and continued investment in world-class infrastructure (Multimedia Super Corridor initiative). Programs and policies to expand the labor pool and deepen English language and technical skills. Could be a good second location for minimizing offshore risk.

Cons: Lacks critical mass to be a top IT services location. Low service maturity and small labor pool.

Philippines

Challenging ★★★★★
Average programmer salary: \$\$
Geopolitical risk: ⚡⚡⚡
English proficiency: ✓✓✓✓

Pros: Ranked fourth overall by A.T. Kearney, due largely to language skills (English with American accents), Western cultural literacy and exposure to global business. Tied with Ghana for the world's best financial incentives for attracting IT business. Bandwidth high compared to neighbors. Years of experience with standard BPO projects, earning country about \$1 billion annually.

Cons: Continued political instability and infrastructure weaknesses. Low IT process maturity. CMM, Six Sigma and other process certifications not followed until recently. On IIPA priority watch list.

Overall Ranking

- ★★★★★ Leading
- ★★★★ Challenging
- ★★★ Emerging
- ★★ Nascent
- ★ Declining

English Proficiency

- ✓✓✓✓ Excellent
- ✓✓✓ Very good
- ✓✓ Good
- ✓ Fair
- ✓ Poor

Average Entry-Level Programmer Salary US \$

(2 years' experience)

- \$ less than \$5K
- \$\$ \$5K-\$10K
- \$\$\$ \$10K-\$15K
- \$\$\$\$ \$15K-\$20K
- \$\$\$\$\$ More than \$20K

Relative Geopolitical Risk

- ⚡ Low
- ⚡⚡ Moderate
- ⚡⚡⚡ High

Vietnam

Nascent ★★
Average programmer salary: \$
Geopolitical risk: ⚡⚡
English proficiency: ✓✓

Pros: Cheap; lowest wages in the outsourcing world. Major contracts with Western telecom providers like Nortel Networks and completion of tech park in Ho Chi Minh City promising. English now standard curriculum. IT sector growing 20% annually. Low attrition rates. Could step in as a low-end provider for basic IT projects as India moves up the value chain.

Cons: High risk of IP loss and infrastructure outages. Entire country operates on 60MB of bandwidth. Inadequate non-IT infrastructure (roads, power grid, airports, real estate development). Most companies can offer only small-scale back-office functions. Low number of English speakers and senior IT managers.

Offshore Outsourcing Guide

Thailand

Nascent ★★

Average programmer salary: \$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓

Pros: Biggest jumper in the A.T. Kearney offshore index, thanks to improvements in education, infrastructure and overall business environment. Look out, Philippines—could emerge as a low-cost challenger.

Cons: Weak English-language capabilities. On IIPA priority watch list.

Singapore

Declining ★

Average programmer salary: \$\$\$\$

Geopolitical risk: ⚡

English proficiency: ✓✓

Pros: Positions itself as stable location for sensitive, high-end activities, with emphasis on business continuity/disaster recovery, IP protection and data privacy. Ranked fifth on A.T. Kearney's offshoring attractiveness list. Topped business environment category. When Kearney rejiggered its index to give risk minimization more weight, Singapore came out on top.

Cons: So expensive that Singapore outsources to China.

EUROPE

Ireland

Declining ★

Average programmer salary: \$\$\$\$\$

Geopolitical risk: ⚡

English proficiency: ✓✓✓✓✓

Pros: Mature market for offshore contact center services. Excellent infrastructure. Obvious cultural compatibility. Political stability and data and IP security big pluses.

Cons: Too expensive; no longer viable center for labor arbitrage. Gap between labor supply and demand a burgeoning problem.

Hungary

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓

Pros: EU member boasts low costs and good cultural compatibility with Western Europe. Establishing itself as data center home for businesses in nearby European countries.

Cons: Wages and other costs on uptick. Poor English skills and infrastructure.

Romania

Emerging ★★★

Average programmer salary: \$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓✓

Pros: Attractive destination for Europe—particularly Italy—because of proximity and well-developed English and Western European language skills. Romanian IT professionals consistently place in top rank at global programming competitions. Most IT professionals per capita in Europe, according to Brainbench. Can provide multi-lingual call centers, with particular specialty in French and Italian.

Cons: Weak IT infrastructure (may improve as country attempts to join EU next year). Most companies are small—15 to 20 people. IP protection a problem, although piracy rate has decreased recently.

Bulgaria

Emerging ★★★

Average programmer salary: \$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓

Pros: Historical high-tech center of former Soviet Union. Good for high-end, complex but small-scale projects. Renovating Soviet-era telecom and IT infrastructure preparing for possible EU membership in 2007. Experienced service providers (as many as a thousand Western companies were doing IT work in Bulgaria as far back as the 1990s). Excellent math, science and engineering schools. IT workers experienced in complex technologies.

Cons: Small workforce; only 800 Bulgarians

Overall Ranking

★★★★★ Leading
★★★★ Challenging
★★★ Emerging
★★ Nascent
★ Declining

English Proficiency

✓✓✓✓ Excellent
✓✓✓ Very good
✓✓ Good
✓ Fair
✓ Poor

Average Entry-Level Programmer Salary US \$

(2 years' experience)

\$ less than \$5K
\$\$ \$5K-\$10K
\$\$\$ \$10K-\$15K
\$\$\$\$ \$15K-\$20K
\$\$\$\$\$ More than \$20K

Relative Geopolitical Risk

⚡ Low
⚡⚡ Moderate
⚡⚡⚡ High

graduate with technical degrees each year. IT spending ranks one of the lowest in the Central and Eastern Europe. Can't compete on price or scale with India or China.

Czech Republic

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓✓

Pros: Low costs, political stability and cultural compatibility. Emerged as ideal location for German customer service needs.

Cons: Salaries and other costs on the rise. Little government support for IT services industry. IT process maturity low.

Poland

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓✓

Pros: EU member state a favorite location for German companies (nearly 400,000 German speakers here). Offers cultural and time zone compatibility for much of Western Europe. Good base of English speakers.

Cons: Lack of service maturity and relatively small labor pool. Wages and costs rising.

Offshore Outsourcing Guide

Ukraine

Emerging ★★★

Average programmer salary: \$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓

Pros: IT industry benefited from 2004 political upheaval. IT services sector grew 50% to \$150 million in 2005. Highly educated IT staffs may be able to handle entire development process. Low turnover.

Cons: English not widespread. Political stability questionable. Small talent pool. On IIPA priority watch list.

Russia

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓

Pros: Highly skilled labor pool offering boutique approach to outsourcing. Specializes in complex modeling and creative problem solving. Hourly rates as low as India.

Cons: Ranked 39th out of 40 on business environment metrics, according to A.T. Kearney. Costs rising. Poor infrastructure and security. English and Western European language proficiency lacking. Project management skills low. World's worst for piracy, according to IIPA.

MIDDLE EAST

Israel

Declining ★

Average programmer salary: \$\$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓✓✓

Pros: Promotes itself as ideal location for high-end research and development work. Multilingual customer support. Strong education system and diverse population.

Cons: Politically unstable and expensive. On IIPA priority watch list.

Egypt

Emerging ★★★

Average programmer salary: \$

Geopolitical risk: ⚡⚡⚡

English proficiency: ✓✓✓✓

Pros: Ranks 12th in A.T. Kearney's attractiveness index with highly educated tech workers, historical exposure to Western languages and low costs. Trying to be "gateway" from West to Middle East. Increasing customer service standards. Investing heavily in IT infrastructure. Datamonitor predicts Egypt will experience most aggressive offshore outsourcing growth in the world through the next decade.

Cons: Security and political stability concerns. On IIPA priority watch list.

AFRICA

Ghana

Nascent ★★

Average programmer salary: \$\$

Geopolitical risk: ⚡⚡⚡

English proficiency: ✓✓✓✓

Pros: Government supporting IT services industry and investment programs enticed Allied Computer Services to establish BPO operation here. English is official language. Low turnover rate (2% to 4%). Labor cheap and available. Tied with Philippines for world's best financial incentives for attracting IT business, according to A.T. Kearney.

Cons: Local BPO service providers lack experience. IT services market very small. Just 10,000 IT grads per year.

South Africa

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: ⚡⚡

English proficiency: ✓✓✓✓

Pros: Has attracted high-profile clients for call center outsourcing. Good English proficiency. Time zone compatibility and cultural affinity with Western Europe.

Cons: High costs (particularly telecom) and low process maturity relative to other offshore destinations. High crime rate.

Overall Ranking

★★★★★ Leading
★★★★ Challenging
★★★ Emerging
★★ Nascent
★ Declining

English Proficiency

✓✓✓✓ Excellent
✓✓✓✓ Very good
✓✓✓ Good
✓✓ Fair
✓ Poor

Average Entry-Level Programmer Salary US\$

(2 years' experience)

\$ less than \$5K
\$\$ \$5K-\$10K
\$\$\$ \$10K-\$15K
\$\$\$\$ \$15K-\$20K
\$\$\$\$\$ More than \$20K

Relative Geopolitical Risk

⚡ Low
⚡⚡ Moderate
⚡⚡⚡ High

THE AMERICAS

Canada

Declining ★

Average programmer salary: \$\$\$\$\$

Geopolitical risk: ⚡

English proficiency: ✓✓✓✓✓

Pros: Second largest outsourcing market in the world (after India), earning nearly \$13.7 billion in IT and BPO. Capability for complex integration technology and services. Fifth in people and skills availability, according to A.T. Kearney. Attractive nearshoring option for U.S., with high-quality service, low risks. Low turnover. Ideal spot for English-speaking call centers.

Cons: Shift in exchange rates undid much of previous advantage in labor arbitrage, property overheads. Some U.S. cities now cheaper. May continue to lose attractiveness as services offered by lower-cost countries mature.

Offshore Outsourcing Guide

Mexico

Challenging ★★★★★

Average programmer salary: \$\$\$

Geopolitical risk: //

English proficiency: ✓

Pros: Second largest IT services market in Latin America and still growing. Increasingly attractive as a call center platform for serving Spanish-speaking populations. Call center positions expected to grow from 33,500 today to 80,000 by 2010, according to Data-monitor. Weakness of peso against dollar provides additional savings. IBM, Accenture and EDS maintain significant presence.

Cons: Poor English skills and IT process discipline. Rising costs. Best for low-level application development and maintenance services requiring minimal interaction.

Costa Rica

Emerging ★★★

Average programmer salary: \$\$\$

Geopolitical risk: //

English proficiency: ✓✓✓✓

Pros: Now exporting more software than bananas thanks to low costs, a bilingual workforce and political stability. Becoming a hub for call center and back-office outsourcing. Literacy rate 95%.

Cons: Small labor pool. Government-owned telecom monopoly hampers IT industry growth. Showed improvement in A.T. Kearney's offshoring attractiveness index in 2005, but still ranks below 19 other countries. Tax-free offers to foreign companies ruled illegal by WTO and must be phased out by 2009.

Brazil

Emerging ★★★

Average programmer salary: \$\$

Geopolitical risk: //

English proficiency: ✓

Pros: Latin American leader in IT services market. Leading-edge infrastructure (spends more on technology per GDP than India or China). Graduates 15,000 IT professionals annually; certification rates on the rise. Possible nearshore alternative for North American countries and good possibility for Spanish and Portuguese language projects.

Cons: Business-unfriendly labor and trade laws. Poor English. Globally unsophisticated.

Argentina

Nascent ★★

Average programmer salary: \$\$

Geopolitical risk: //

English proficiency: ✓✓

Pros: Skilled workforce and good IT and telecom infrastructure. Favorable time zone for North American work. Leader in Spanish-content software products. Low costs a result of peso devaluation in 2002.

Cons: IT sector small. Ranked 23rd in offshoring attractiveness by A.T. Kearney. Government not investing in IT services sector. Process maturity low. **CIO**

Senior Editor Stephanie Overby can be reached at soverby@cio.com.

Overall Ranking

★★★★★ Leading
★★★★ Challenging
★★★ Emerging
★★ Nascent
★ Declining

English Proficiency

✓✓✓✓ Excellent
✓✓✓✓ Very good
✓✓✓ Good
✓✓ Fair
✓ Poor

Average Entry-Level Programmer Salary US\$

(2 years' experience)

\$ less than \$5K
\$\$ \$5K-\$10K
\$\$\$ \$10K-\$15K
\$\$\$\$ \$15K-\$20K
\$\$\$\$\$ More than \$20K

Relative Geopolitical Risk

// Low
// Moderate
// High