



# GLOBAL OUTSOURCING GUIDE

# 2006

**Risks, rewards, challenges and opportunities, country by country**

BY STEPHANIE OVERBY

LABOUR 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 \$US50 billion next year.

In this, CIO's third global outsourcing guide, we observe how the offshoring world has changed.



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

## » 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 \$US18 billion in IT and BPO annually. TCS, HC 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 neighbouring 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 AT 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 labour 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 labour pool.

### Philippines

Challenging ★★★★★

Average programmer salary: \$\$

Geopolitical risk: ▲▲▲

English proficiency: ✓✓✓✓

**Pros:** Ranked fourth overall by AT 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 neighbours. Years of experience with standard BPO projects, earning country about \$US1 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.

### Thailand

Nascent ★★

Average programmer salary: \$\$

Geopolitical risk: ▲▲

English proficiency: ✓

**Pros:** Biggest jumper in the AT 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 AT 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.



## Vietnam

Nascent ★★

Average programmer salary: \$

Geopolitical risk: ▲▲

English proficiency: ✓✓

**Pros:** Cheap; lowest wages in the outsourcing world. Major contracts with Western telecomms 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.

## 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 multilingual call centres, 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.

## » EUROPE

### Ireland

Declining ★

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

Geopolitical risk: ▲

English proficiency: ✓✓✓✓✓

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

**Cons:** Too expensive; no longer viable centre for labour arbitrage. Gap between labour supply and demand a burgeoning problem.

## 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.

## 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 centre home for businesses in nearby European countries.

**Cons:** Wages and other costs on up-tick. Poor English skills and infrastructure.

## Bulgaria

Emerging ★★★

Average programmer salary: \$\$

Geopolitical risk: ▲▲

English proficiency: ✓✓

**Pros:** Historical high-tech centre of former Soviet Union. Good for high-end, complex but small-scale projects. Renovating Soviet-era telecomms 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 maths, science and engineering schools. IT workers experienced in complex technologies.

**Cons:** Small workforce; only 800 Bulgarians 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.

#### Overall Ranking

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#### English Proficiency

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- ✓✓✓ Good
- ✓✓ Fair
- ✓ Poor

#### Average Entry-Level Programmer Salary \$US (2 years' experience)

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#### Relative Geopolitical Risk

- ▲▲ Low
- ▲▲▲ Moderate
- ▲▲▲▲ High





## Poland

Challenging ★ ★ ★ ★

Average programmer salary: \$\$\$

Geopolitical risk: ▲ ▲

English proficiency: ✓ ✓ ✓

**Pros:** EU member state a favourite 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 labour pool. Wages and costs rising.

## Russia

Challenging ★ ★ ★ ★

Average programmer salary: \$\$\$

Geopolitical risk: ▲ ▲

English proficiency: ✓

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

**Cons:** Ranked 39th out of 40 on business environment metrics, according to AT 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.

## 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.

## » 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 AT 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 ★ ★

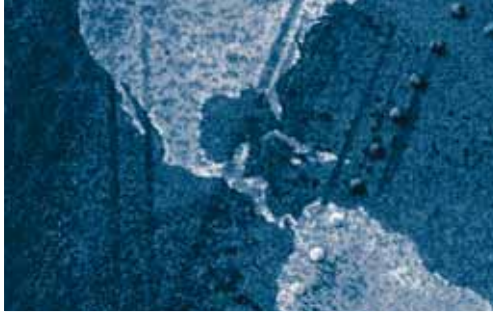
Average programmer salary: \$\$

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%). Labour cheap and available. Tied with Philippines for world's best financial incentives for attracting IT business, according to AT 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 centre outsourcing. Good English proficiency. Time zone compatibility and cultural affinity with Western Europe.

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

## » THE AMERICAS

## Canada

Declining ★

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

Geopolitical risk: ▲

English proficiency: ✓✓✓✓✓

**Pros:** Second largest outsourcing market in the world (after India), earning nearly \$US13.7 billion in IT and BPO. Capability for complex integration technology and services. Fifth in people and skills availability, according to AT Kearney. Attractive nearshoring option for US (obviously less so for Australia), with high-quality service, low risks. Low turnover. Ideal spot for English-speaking call centres.

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

## 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 centre platform for serving Spanish-speaking populations. Call centre positions expected to grow from 33,500 today to 80,000 by 2010, according to Datamonitor. Weakness of peso against dollar and other currencies 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 centre and back-office outsourcing. Literacy rate 95%.

**Cons:** Small labour pool. Government-owned telecomms monopoly hampers IT industry growth. Showed improvement in AT Kearney's offshoring attractiveness index in 2005, but still ranks below 19 other countries. Tax-free offers to foreign companies ruled illegal by WIG 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 labour and trade laws. Poor English. Globally unsophisticated.

## Argentina

Nascent ★★

Average programmer salary: \$\$

Geopolitical risk: ▲▲

English proficiency: ✓✓

**Pros:** Skilled workforce and good IT and telecomms infrastructure. Favourable 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 offshore attractiveness by AT Kearney. Government not investing in IT services sector. Process maturity low.

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