The most popular offshore sites for service functions are overheating. Now is the time for companies to explore a world of opportunity beyond those hot spots and to base investment decisions not just on costs but also on talent, markets, strategic aims, and appetite for risk.

Smarter Offshoring

by Diana Farrell
The most popular offshore sites for service functions are overheating. Now is the time for companies to explore a world of opportunity beyond those hot spots and to base investment decisions not just on costs but also on talent, markets, strategic aims, and appetite for risk.

Smarter Offshoring

by Diana Farrell

The practice of moving service jobs to low-wage countries is entering a new phase. For offshoring functions ranging from computer programming and R&D to call-center and back-office tasks, U.S. and western European companies will have to expand substantially the number of locations they consider. In choosing a city, they will have to focus less on low wages and much more on other ways that candidate cities can fulfill their business needs.

In the past ten to 15 years, the vast majority of offshore service jobs have gone to just a handful of cities in India, eastern Europe, and Russia, notably Hyderabad, Bangalore, Delhi, Mumbai, Budapest, Prague, and Moscow. But popularity has come at a price. The turnover rate among IT staff in the banking industry is 30% to 40% in some Indian cities, and hiring graduates from the country’s prestigious technology institutes has become a nightmare. “You have to wait in line from 5 AM and make commitments to applicants on the spot,” reports a recruiter who has been hunting for engineers to fill posts in packaged-software and IT hardware companies.

In Mumbai, a hot spot for overseas investment banks, escalating wages and accelerating turnover are beginning to worry firms that need college graduates for sophisticated jobs such as reconciling foreign-exchange transactions. In Bangalore, the demand for college-educated people fluent in English to staff offshore call centers has pushed wages up. The story is similar in Moscow and St. Petersburg, where pay for software engineers has soared by 50% in the past two to three years. Prague seems to be heading down the same path. We project that its local colleges and universities will be hard-pressed to meet the demand for IT engineers by 2008.

Little wonder that some executives are questioning whether the touted endless supply of low-cost talent in developing countries is already drying up. The happy answer is that the tight labor markets in the hot spots are the exception, not the rule.

The McKinsey Global Institute (MGI) recently assessed the supply of college graduates
Why Companies Hunt in Packs

The offshoring pioneers in the early 1990s—global giants like General Electric and British Airways—were drawn to locations with excellent universities that offered plentiful supplies of first-rate talent at low wages. After seeing these first movers’ cost advantages, other companies began flocking to the same cities. Local

suitable for employment by multinational companies in 28 low-wage countries. We found that there is a huge and rapidly growing pool of low-wage talent dispersed around the globe. (See the exhibit “The Vast Talent Pool”) More than 90% of these people are located outside the current hot spots. Some live in countries with offshoring hubs but in less well-known cities—for instance, Zlin in the Czech Republic and the so-called third-tier Indian cities such as Ahmedabad and Chandigarh. Some are ready and waiting in countries that are just entering the fray—South Africa, Morocco, Argentina, and Brazil, among others. Pioneers such as Amazon.com, Telefónica, Intel, and Sakonnet Technology have recently established or announced plans for offshore centers in Cape Town, Tangier, Córdoba, and Rio de Janeiro, respectively.

Not all companies will feel comfortable locating an offshore operation—especially their first—somewhere that’s not tried-and-true. But to make a rational choice, they need to compare the real costs of treading the well-worn path with those of going somewhere new. That means evaluating their unique needs for a given offshore operation along several dimensions (such as skill level of workers, connectivity, and the business environment) and understanding how various locations can meet those needs—and at what risk and cost—for the foreseeable future.

Most companies today don’t take that approach. Even those with sophisticated international networks usually consider only a few locations on the basis of their previous experience and what other companies are doing. Most also use a fairly narrow set of decision criteria, with labor costs, time-zone considerations, and creature comforts generally paramount. To make the right choice among the increasing number of possible locations, these companies must consider other important factors such as wage-inflation trends, future labor supplies, and recruitment costs.

Beyond the Hot Spots

In the 28 low-wage countries that MGI studied, there were about 6.4 million young professionals suitable for offshore jobs in 2003. “Suitable” professionals are university graduates with up to seven years of experience who have the skills and attributes (language skills, technical knowledge, ability to interact successfully in a corporate environment) that multinationals want. Although not all these workers live in or near a major city, we believe that multinationals could gain access to the majority of them.

Diana Farrell is the director of the McKinsey Global Institute, McKinsey & Company’s economics think tank, in San Francisco.
The percentage of suitable professionals varies widely from country to country. For instance, 10% of engineers in China are suitable for employment in a multinational, compared with 20% of Filipino engineers. So even though China’s population is 16 times the size of the Philippines’, its pool of suitable engineers is only three times as big. Likewise, Poland has nearly as many suitable engineers as Russia, which is much more populous.

MGI projects that the supply of college-educated talent will continue to outstrip the demand from multinationals’ offshore operations for many years to come in nearly all of the eight occupational categories we analyzed. For instance, we project that the supplies of support staff and young professional generalists suitable for employment by multinational companies in emerging markets will exceed demand by 98% and 78%, respectively, in 2008. Only the aggregate supply of engineers in low-wage countries looks as though it will be a little tight. (See the exhibit “The Supply and Demand Outlook.”)

The bright outlook for the overall supply of low-wage talent is due in large part to the robust growth in the number of university graduates that developing countries are churning out: 5.5% per year, compared with an annual increase of just 1% in developed countries. Of course, developed countries have a larger base of graduates, but faster growth in the developing world’s graduate pool is closing the gap.

For instance, in 2003, there were about 30% fewer engineers in low-wage economies than in high- and mid-wage countries. By 2008, when young professional engineers worldwide will number more than 2 million, that gap will be 18%. The supply of suitable finance and accounting professionals from developing countries will outnumber those from high-wage ones by that time. Growth in the supply of graduates with qualifications that multinationals most desire is particularly rapid: In just five years, the proportion of degrees awarded in business and economics has jumped from 18% to 31% of the total in Russia and from 16% to 36% of the total in Poland.

The huge aggregate supply of competent professionals available for hire in emerging markets means that their average wages will remain relatively low for the foreseeable future, despite what the current wage inflation in offshore hot spots might suggest. Consider engineers, the most supply-constrained occupational category. Our model indicates that when aggregate demand pushes up wages for engineers in India (where average pay is the lowest in the world) from the current 12% of U.S. levels to about 30%, companies will begin to employ graduates from the many other countries—including the Philippines, China, and Mexico—where average wages will be lower or comparable. Because the supply of engineers from these countries will be sufficient to satisfy all likely demand from companies’ offshore operations until at least 2015, as far as we can reasonably project, we believe that the average wages for engineers in all these countries will not rise above the 30% mark.

At the same time, offshoring is unlikely to cause wages in high-wage countries to decrease significantly. (The only exceptions will be a few niche occupations such as low-value-added software coding.) That’s because total offshore employment in services will likely represent a tiny fraction of overall employment in developed economies for decades. These trends indicate that offshoring will be a strategy worth pursuing for many years.

The Vast Talent Pool

More than 90% of the supply of young professionals suitable for work in offshore centers reside outside the current hot spot cities, and 72% live outside India.

![Pie chart showing the distribution of the talent pool: 28% India, 72% other countries.](image)
Emerging New Candidates

Even within countries that already attract a lot of offshore operations, there are untapped pools of qualified and less expensive labor beyond the hot spots. Managers can find these people if they use their imaginations. In some instances, companies may be able to persuade attractive employees to move from other cities to their hot spot operations—for example, with low-cost, preapproved loans for housing. Managers of the larger offshore centers in Prague have used such tactics to recruit from other Czech and Slovakian cities like Brno and Bratislava. Similar tactics might also be appropriate in China. Only about one-quarter of graduates in China live in a city or region that’s close to a major international airport and, therefore, is a viable place for an offshore operation. But MGI’s analysis of migration patterns indicates that some 34% of Chinese graduates in the less accessible areas would be willing to move for a good job. (In contrast, in Russia, where one-third of graduates live near a major airport, only 16% of the rest would be prepared to move nearer to one for the sake of a job.)

Setting up operations in towns that are within a reasonable drive of a major airport or arranging for employees to telecommute are other ways to reach untapped pools of talent. Companies are employing both approaches in India, for example. Several companies that now find Mumbai overheated have established smaller operations in the (for now) pleasant university town of Pune, 120 miles away. Some IT operations, both local vendors and captive offshore ventures, have begun to employ telecommuters in cities such as Chandigarh and Mysore for simple tasks such as typing, data entry, and order processing.

For their part, governments in a number of low-wage nations are assessing what distinctive advantages their countries offer (in terms of labor skills, risk profile, or communications infrastructure, for example) and are targeting multinationals most likely to appreciate those advantages.

Dubai, for instance, is a relative newcomer to the global labor market. Its government sponsored a study of the strengths and weaknesses of rival offshore locations to identify a niche where it might outperform them. The study found Dubai’s disadvantages—fairly high labor and telecommunications costs and the tiny sales potential of its local market compared with, say, China—are offset to an extent by its multinational, skilled, and stable workforce (Dubai law forbids frequent job changes); robust infrastructure; zero taxes; and five-star amenities. Dubai is now marketing itself as the ideal location for IT disaster recovery and backup facilities for companies with IT-intensive offshore operations in countries like India and the Philippines, where labor is cheaper but the infrastructure is also less robust.

South Africa offers a package that it believes is particularly attractive to companies in the insurance and banking sectors: a pool of qualified people (the country has an unusually large number of actuaries), a well-developed telecommunications and IT infrastructure, and good business services. South Africa does not match India on cost—a call-center seat in Cape Town costs one-third more to operate (although still about half what it would cost in

The Supply and Demand Outlook

The projected supply of young, university-educated workers suitable for employment at offshore centers in 28 low-wage countries in 2008 will comfortably outstrip likely demand in most professions. Engineering is the potential exception. Here’s a look at the top five categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Demand</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>secretarial and clerical</td>
<td>752</td>
<td>3,1296</td>
</tr>
<tr>
<td>generalist (such as HR, sales, and marketing)</td>
<td>722</td>
<td>3,245</td>
</tr>
<tr>
<td>finance and accounting</td>
<td>112</td>
<td>2,184</td>
</tr>
<tr>
<td>engineering analyst</td>
<td>596</td>
<td>946</td>
</tr>
<tr>
<td>analyst</td>
<td>50</td>
<td>1,799</td>
</tr>
</tbody>
</table>

For more detail on these findings, see “The Emerging Global Labor Market” at www.mckinsey.com/mgi.
Factors in Choosing a Location

To make the right offshoring decisions, companies should assemble detailed information on a number of factors:

**Cost**
- Labor: current average wages for skilled workers and managers
- Infrastructure: unit costs for telecom networks, Internet access, and power
- Real estate: cost of class A office space
- Corporate taxes: the total tax burden or, conversely, the tax breaks and other incentives for local investment

**Availability of Skills**
- Skill pool: size of labor force with the required skills
- Size of offshore sector: dollar volume and share of employment in the sector, as well as share of these services as a percentage of total exports

**Environment**
- Government support: policy on foreign investment, labor laws, bureaucratic and regulatory burden, and level of corruption
- Business environment: compatibility with prevailing business culture and ethics
- Living environment: overall quality of life, prevalence of HIV infection, and serious crimes per capita
- Accessibility: travel time, flight frequency, and time difference

**Market Potential**
- Attractiveness of local market: current GDP and GDP growth rate
- Access to nearby markets: in the host country and adjacent region

**Risk Profile**
- Disruptive events: risk of labor uprising, political unrest, and natural disasters
- Security: risks to personal security and property from fraud, crime, and terrorism
- Regulatory risk: stability, fairness, and efficiency of legal framework
- Macroeconomic risk: cost inflation, currency fluctuation, and capital freedom
- Intellectual-property risk: strength of data and IP protection regime

**Quality of Infrastructure**
- Telecom and IT: network downtime, speed of service restoration, connectivity
- Real estate: availability and quality
- Transportation: scale and quality of road and rail network
- Power: reliability of power supply

the United Kingdom). Moreover, telecommunications are more expensive than in competitor countries, and the inherent risks of doing business in South Africa are relatively high. Still, South African employees prize call-center jobs—unlike some employees in central European cities—and are thus highly motivated and disinclined to hop from job to job. South Africa also boasts certain skills advantages. For instance, some British insurers recognize South African accreditation for claims processors. So even though the country might look unappealing on the basis of costs alone, those that give more weight to its other benefits will find it highly attractive. Amazon.com opened a software development center in Cape Town in 2005, and IBM has plans for a call center in Johannesburg for corporate clients.

Other countries are positioning themselves to multinationals with some success. Morocco is now home to customer-care and back-office processing centers that perform work for a number of major French and Spanish companies requiring fluent speakers of their home languages. Neighboring Tunisia has used its stable, low-cost workforce, modern infrastructure, and business-friendly regulations to attract companies such as Siemens, GE Capital, and Wanadoo, the Internet service provider. Vietnam offers university graduates who are well schooled in mathematics, speak French, English, German, or Russian, and don’t demand high wages. (They expect a starting salary only a little higher than that of unskilled factory workers in China.) Attracted by these advantages, WorldVest Base, a Chicago-based company that provides market data to investors around the globe, employs about 50 young, mostly female graduates in Ho Chi Minh City to search for information on the Web.

Navigating the Global Labor Market

The problems facing the hot spots, coupled with the emergence of many more countries able and willing to provide offshore services, mean that picking a site has become more complicated. A company needs a process for articulating precisely what it requires from an offshore location and assessing all the locations that could meet those needs into the future at acceptable cost and risk. This involves evaluating current conditions and how dynamic supply and demand conditions in the local labor markets are likely to affect the company’s operation over time. (See the exhibit “Factors in Choosing a Location.”)

A company should weigh data on alternative sites on the basis of the relative impor-
Comparing Locations Objectively

The McKinsey Global Institute’s approach to comparing potential offshore locations can help executives make decisions on the basis of facts rather than intuition, personal preferences, or past experience. Not every company will have the resources to gather all the detailed data we recommend. That’s okay. What matters more is gathering enough data to gain an understanding of the strengths and weaknesses of potential locations.

1. Draw up a long list of possible locations. All companies will have some high-level reasons for pursuing an offshore venture—the need to reduce costs, find new sources of revenue, or secure new sources of talent, for instance. They will also have some general aversions—for example, they might not like the idea of locating a new venture in a distant time zone or in a country known for political instability. With considerations like these in mind, a company can draw up a list of eight or so candidate cities in three to five countries.

2. Define the decision criteria. Our research shows that companies typically use six key factors to describe their ideal offshore location: the overall cost of operating; the availability of the skills they seek; the sales potential of the national domestic market and adjacent markets; the intrinsic risk of doing business in the location; the attractiveness of the business and living environments; and the quality of the infrastructure. In winnowing down the locations on its long list, a company will need to consider a number of subcriteria. For example, the overall quality of a city’s infrastructure depends on the reliability of the telecommunications network and power supply, the availability of good office space, and the state of the roads and railways.

3. Collect data for each potential location. Some data will be quantitative, such as labor costs for the various skill levels the company requires. Some will be more qualitative, such as perceptions of risk. But a company can make objective assessments, even for qualitative criteria, by consulting the right information sources. In assessing a location’s intrinsic risk, for example, possible sources of information include the Economist Intelligence Unit’s industrial relations rating, the World Competitiveness Yearbook’s personal security and private property index, and the United Nations Development Program’s disaster risk index table.

Some data, such as the potential of the domestic market, will apply to all places in the country. But in many instances, the information can vary significantly across cities, including those in the same country. What are the local costs of labor, telecommunications, power, and real estate? How high are local business taxes? Is the city prone to flooding?

Managers then give the location a score (say, on a scale from 1 to 5) on each factor.

4. Give more weight to the criteria that matter most to your company. Companies should assign weights to all criteria so that the final score reflects their relative importance. A bank based in Europe that was keen to enter new, large markets gave its highest weighting to criteria measuring market potential, for example, while a U.S. financial institution that was looking for a location for a captive IT center to serve its U.S. customers gave highest weightings to cost, infrastructure, and risk, particularly security.

Assigning appropriate weightings to each criterion is a subjective task. But that’s a strength of the approach: The discussion allows managers to reach a shared understanding of those factors that will maximize revenue, minimize cost, or both for the activity in question. That is a discussion management teams need to have, even if they don’t do all the detailed math.

5. Rank locations in order of their attractiveness to your company. The next step is to multiply the scores by their weightings and then average the weighted scores to arrive at an overall score for each location under consideration. Now the site-selection team can identify the two or three cities that may qualify as the best locations.

6. Assess the dynamics of the labor pool. The final test for the short-listed cities is whether the local talent supply is sustainable. Companies must estimate future supply and demand for young professionals and middle managers in the occupations the company is most likely to recruit locally. Using data from local colleges and interviews with HR executives who know the city, companies can come up with a rough estimate of how many young people will graduate from local schools over the next five years or so in the relevant disciplines, what fraction are likely to fit into a multinational environment, and how easy it will be to fill any gaps with graduates from other cities in the same country. Other companies’ plans to extend or build new offshore centers in the city will give a picture of growth in future demand. Examining recent movements in wage levels and turnover rates will show whether the local labor supply in any particular skill area is already constrained. This information will also help companies make educated guesses about how long current wage levels are likely to last in the occupations of interest.
tance of the factors driving its decision to go offshore. If the need for the lowest-cost talent is the main impetus, then data on this factor should receive the highest weighting. But many companies will want to give substantial weight to other factors, such as the size of the market accessible from a particular site or whether any managers from the home country will want to live there. The outcome of this process is a simple ranking of potential locations based on a much more granular understanding of their relative attractions than companies may have today. (See the sidebar “Comparing Locations Objectively.”)

This kind of rigorous approach is important not just for companies establishing their first captive offshore operation. Firms adding new captive operations to those they already own as well as companies taking the vendor route—that is, outsourcing a function or process to an independent offshore provider—will also benefit from such an analysis.

A company that already has an extensive global network of captive operations may understandably feel justified in locating a new operation somewhere it already knows, without further analysis. Using existing management resources, infrastructure, and government connections in a familiar place obviously lessens the risk of any new venture overseas. But the familiar may not necessarily be best for the business. One packaged-software company based in the United States had a strong bias toward locating an offshore center in India. It had sales operations there, and many of its board members were Indian. A rigorous, objective analysis of potential locations, however, showed that a service center located in a city in China had a markedly higher net present value than one in India. The reason: The center would help the company gain access to the appreciably larger domestic Chinese market by providing valuable local knowledge, contacts, and managerial expertise.

Similarly, Intel decided last November to open its next overseas software-development center in Córdoba, Argentina, rather than simply expand existing software-development centers in China and Russia. Intel said Argentina’s strategic plan for nurturing its software industry, which includes tax breaks for technology companies and increased investments in education and research, influenced its choice.

Companies choosing to outsource to local vendors may feel their time would be better spent analyzing the terms of offers from competing vendors rather than weighing the pros and cons of competing locations. But unless a company understands the dynamics of the locations where vendors operate, it won’t be able to understand whether the vendors will be able to meet the company’s needs for any length of time. Where it’s possible to switch vendors easily, this may be less of a consideration. But switching vendors also involves extra costs and a lot of management attention.

A global financial-services company employed such an approach in picking an offshore vendor to perform its back-office finance and accounting processes. Its board of directors had a strong preference for using a vendor in India. However, the company decided to consider other vendors and analyzed a number of locations in India, eastern Europe, and Asia. Knowing the circumstances of the labor market in various cities meant the management team could ask competing vendors detailed questions about their plans for handling wage increases or turnover should their labor markets heat up. For example, did a vendor have contingency plans to open new locations in the same country or move to a city in a different country? Was it planning to expand the potential labor supply by training less-qualified staff in-house? This line of questioning led the company to select a candidate that had most of its operations in an eastern European city and backup services in Asia.

A process for choosing sites that is deeply rooted in a company’s unique business needs will lead different companies to make different choices. In many cases, such an approach may result in decisions that are counterintuitive or defy original assumptions.

For the very risk averse, a known hot spot may be the most rational location for a major new operation. Consider the recent decision of a midsize regional bank to establish a captive offshore center that will employ 1,500 information technology professionals in an Indian hot spot. Despite the city’s overheating labor market, the bank still ranked it number one of the ten locations it assessed. The bank knew the city: It had run an offshore center there that had employed a few hundred back-office people for the past ten years. Some major competitors had large operations in the
area similar to the new one the bank wanted to establish, so the incoming bank knew it could recruit the skills it needed. The local climate and culture suited the bank’s expatriate managers. There were direct flights to and from its home city. Finally, the bank’s executives were confident that it would still reap a substantial cost advantage even if it had to pay considerably more down the road to attract and retain talent. (There is now an 80% difference between wages for software engineers in the bank’s home country and those in the Indian city. But the executives calculated that even if wage inflation among Indian software engineers were to run rampant, there would still be a 40% gap in 20 years.) Costs in other locations were likely to remain lower for a long time, but because of the heavier weight that the bank gave to risk and other factors, the known hot spot won the contest.

Companies that are marginally less risk averse are likely to find a range of appealing alternatives to the hot spots even if cost is their major preoccupation. A North American airline seeking a new location for its customer-support function ranked 16 cities in low- and high-wage countries on the basis of six criteria. The company gave a 40% weighting to costs in its decision, and cities in India and China were in first and second place on that measure alone. When all the criteria were taken into account, however, cities in several other countries were right behind those in India and China. Instead of outsourcing the operation to a vendor in India, the board’s original intention, the location team is now leaning toward a vendor in Brazil because of its more attractive living environment and infrastructure.

Building a Sustainable Market
By giving more thought to how prospective offshore sites can serve their special needs and not just following the pack, companies stand to reap broader, longer-term advantages. One of these is lower labor costs in developing countries overall. The expansion of the offshore market to include many new cities will cause wage levels for young professionals to rise smoothly and gradually across emerging markets. Even the increases in the existing hot spots will be held in check.

U.S. and western European companies will not be the only beneficiaries of these trends. Many cities and countries that have so far played only minor roles in the emerging global labor market will also benefit. Offshore operations will provide them with badly needed employment and capital. Entrepreneurial college graduates will have opportunities to develop the skills and management experience they need to start local businesses of their own that serve both foreign and local corporations. The result will be a growing middle class of professionals and accelerating economic growth that will help struggling countries raise themselves out of poverty. By casting their nets wider for low-wage talent, U.S. and western European corporations can help these countries and themselves.

Reprint R0606E
To order, see the next page or call 800-988-0886 or 617-783-7500 or go to www.hbr.org
Further Reading

The Harvard Business Review
Paperback Series

Here are the landmark ideas—both contemporary and classic—that have established Harvard Business Review as required reading for businesspeople around the globe. Each paperback includes eight of the leading articles on a particular business topic. The series includes over thirty titles, including the following best-sellers:

- Harvard Business Review on Brand Management
  Product no. 1445

- Harvard Business Review on Change
  Product no. 8842

- Harvard Business Review on Leadership
  Product no. 8834

- Harvard Business Review on Managing People
  Product no. 9075

- Harvard Business Review on Measuring Corporate Performance
  Product no. 8826


To Order

For reprints, Harvard Business Review OnPoint orders, and subscriptions to Harvard Business Review:
Call 800-988-0886 or 617-783-7500.
Go to www.hbr.org

For customized and quantity orders of reprints and Harvard Business Review OnPoint products:
Call Rich Gravelin at 617-783-7626,
or e-mail him at rgravelin@hbsp.harvard.edu