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Offshoring the Brains as Well As the Brawn

Companies Seek Intellectual Talent Beyond Their Borders

Offshoring Research Network

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OFFSHORING THE BRAINS AS WELL AS THE BRAWN

Companies Seek Intellectual Talent Beyond Their Borders

Offshoring is no longer just about lowering costs by moving manufacturing and back-office operations to labor-efficient locations like China and India. Nor is it about modularizing and outsourcing transaction-intensive IT operations and business processes. More than ever, offshoring is about sourcing the talent needed to sustain the innovation engine of a company. According to a new study coauthored by the Duke University Offshoring Research Network (ORN) project and Booz & Company, providers of outsourcing services are increasingly performing work such as new product development (NPD), research and development (R&D), engineering, and knowledge-intensive analytical services—all of which would have been considered too proprietary or close to the core as recently as a few years ago. Why?

The uncomfortable truth is that companies simply cannot find enough of the high-end analytical minds they need at home; scientists, engineers, and inventors are in short supply even in Silicon Valley, the Research Triangle, and innovation hub cities in Europe. So organizations are looking outside the closeted confines of company labs and corporate headquarters, beyond just India and China, to tap every available pool and even every puddle of talent worldwide. Fortunately, the enterprising service providers we surveyed for this study are springing up all over the planet to fulfill these companies' needs for innovation and knowledge work.

The business model for knowledge services and intellectual capital development is globalizing in much the same way that manufacturing globalized 30 years ago. Just as manufacturing firms had to learn to outsource production to low-cost contractors in far-flung locations and then reintegrate the output of these scattered suppliers, companies in virtually every industry now have to make that same leap with their service, knowledge, and innovation functions. The magnitude of this cultural shift, not to mention the magnitude of the organizational transformation, cannot be overestimated; this new operating model upends most companies' fundamental sense of who they are and how they operate. Major multinationals must act like octopi stretching their tentacles in every direction to grasp the necessary skills and capabilities.

This conclusion is consistent with the results of last year's study, which surveyed the buyers of offshoring services.[1] Companies that offshore cited "access to qualified personnel" as one of the key drivers of their decision to do so. Moreover, they confirmed that they were increasingly offshoring innovation-centered processes, including product design, engineering, and R&D. The global race for scientific,

[1] There are two versions of the survey results available online: "Next Generation Offshoring: The Globalization of Innovation" (https://offshoring.fuqua.duke.edu/report.jsp) and "The Globalization of White-Collar Work: The Facts and Fallout of Next-Generation Offshoring" (http://www.booz.com/global/home/what_we_think/reports_and_white_papers/ic-display/41020115).

Methodology

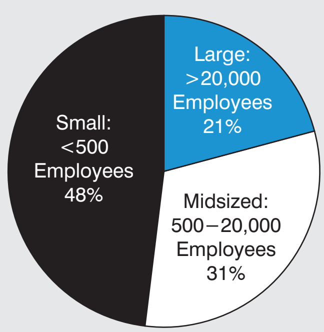
The Duke University Offshoring Research Network (ORN) project was initiated in 2004 to track the implementation experiences of companies that outsource and offshore. This is the first year it has examined the service provider's perspective and includes data on:

- Scope of services
- Locations
- Contracts and client relationships
- Savings and margins
- Recruiting and training strategies
- Future plans

This survey complements global corporate surveys on outsourcing and offshoring conducted in 2006 with Booz Allen Hamilton (now Booz & Company) and in 2005 and 2004 with Archstone Consulting.

This service provider survey deliberately includes both large integrated global service providers and small, entrepreneurial service providers. Overall, it netted 84 completed surveys from a pool of 120 that were returned by providers based in the United States, Europe, India, China, Brazil, and other countries.

2007 Service Provider Survey Participants by Size of Company



Lead Supporters of the service provider survey include 6th Sense Analytics, Archstone Consulting, Booz & Company, Genpact, ITAA, NASSCOM, PriceWaterhouse Coopers, QuickStart Global, and Sonnenschein Nath & Rosenthal LLP.

Affiliate Sponsors include Chronos Systems, ETelecare Global Solutions, Kirkland & Ellis LLP, Quest Global, Sayma, Symphony, TPI, and WNS Global Services.

engineering, and analytical talent is ongoing; this year's study confirms that service providers have now joined their clients in the chase.

The speed of the global race for talent means that it will be increasingly difficult to offshore work to just one location or one service provider. Companies will have to source from multiple global locations via a network of best-of-breed service providers. In the case of higher-end knowledge and innovation services (which we define as engineering, new product development, knowledge-intensive analytical services, and R&D), these providers are often smaller, specialized firms, so the complexity of structuring and managing this network only increases. Many companies are now experimenting with new forms of organizational models to accommodate this complexity.

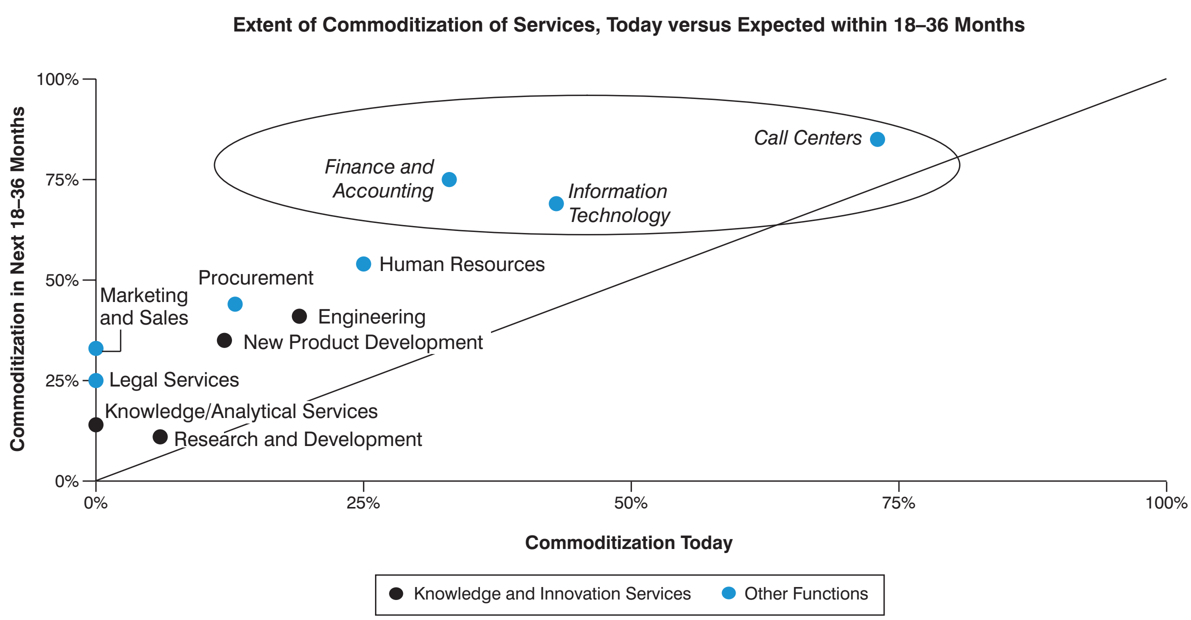
Specifically, companies are aligning themselves around a new globally distributed organizational model that treats foreign contractors as privileged collaborators in achieving the company's growth objectives—even if a given service provider sells to a competitor. In such a model, the organizational culture will necessarily have to accommodate diverse influences and span multiple time zones. And decision-making authority will have to move to where the best talent and information reside, rather than being concentrated in a particular headquarters country.

This is the broad view developed by Booz & Company and Duke University, based on the findings of the first annual Service Provider Survey conducted by Duke's Offshoring Research Network (see "Methodology"). The five key findings from the survey follow.

1) Transactions "R" Us Is a Commodity Business

Transaction-intensive outsourced services—such as the development and maintenance of IT applications, finance and accounting, and call centers—have rapidly become commoditized. Traditional business process outsourcing (BPO) and information technology outsourcing (ITO) are already highly standardized, and this commoditization trend has been creeping up the value chain (see Exhibit 1). Offshoring financial back-office functions and application development

Exhibit 1
Transaction-Intensive Services Are Becoming Commoditized



Note: Percentage of providers rating both dimensions as high/very high.
Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

services has become as old hat as outsourcing janitorial services.

Predictably, price points for these administrative services are expected to decline in the near term, placing pressure on profit margins until the service provider market consolidates. Becoming the low-cost provider in each area will be the key to competitive advantage for outsourcers, and we anticipate that M&A activity and the acquisition of captive operations will increase as large providers seek volume to realize economies of scale.

Going forward, the only sustainable way to make money on these transactional services—from the service provider's perspective—will be to invest in end-to-end process reengineering capabilities to deliver significant improvements in efficiency. Similarly, for clients, the only way they will be able to sustain the historically high savings on these offshored services will be to coordinate more closely with service providers and continuously improve their own process efficiency.

The model for success in running a call center or accounting back office has shifted decisively away from the low-cost global "body shop" approach favored for years (in which the cheap parts were cheap people) to a more professional model staffed with highly competent people capable of executing these new, more efficient business processes.

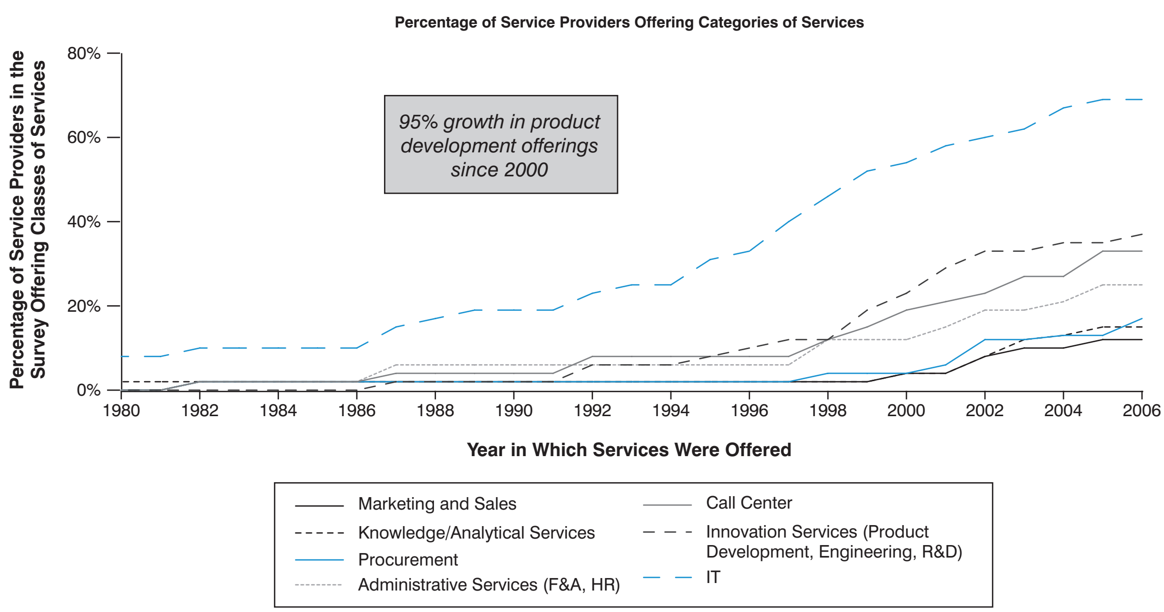
To make this transition, providers are recognizing that they need to spend more on training people and building their skills to render their transaction-intensive operations more productive and efficient. At the same time, providers are seeking more complex work that adds more value to minimize the inevitable erosion of their revenue base.

2) Innovation and Knowledge Services Are a Win/Win

As more traditional transactional services are commoditized, service providers are looking to build capabilities in new markets that offer higher margins. The "hot" sectors in offshoring these days are new product development and design, engineering services, R&D, and analytical knowledge services, including legal services. In fact, innovation services are now the second most prevalent set of services offered by providers (after IT) and among the fastest-growing service lines (see Exhibit 2).

Exhibit 2

Growth in Innovation Services Is Second Only to Growth in IT



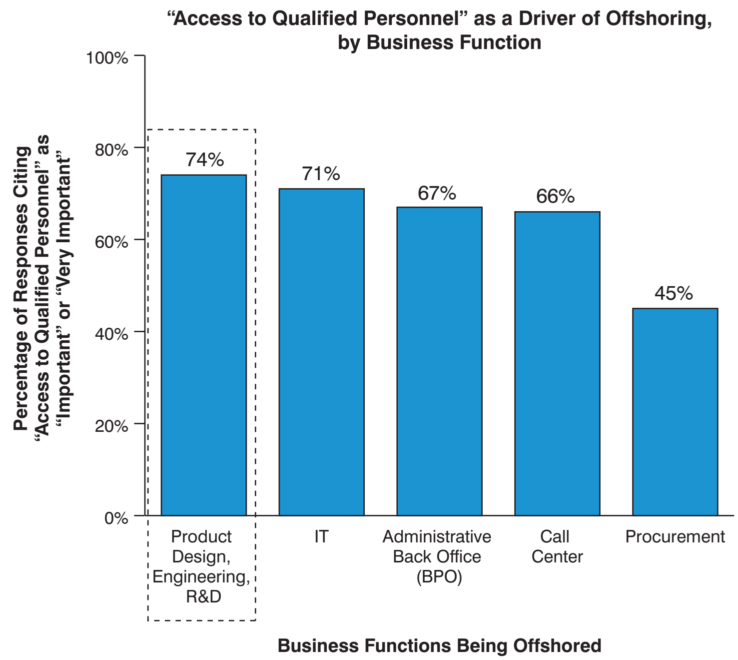
Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

The 2006 survey of companies that engage in offshoring sheds light on why innovation services are growing at such a fast clip. These companies cannot satisfy their need for highly skilled engineering and analytical talent in-house, so they are increasingly turning to outsourcing and offshoring to fuel their accelerated innovation needs. As Exhibit 3 demonstrates, "access to qualified personnel" is cited by three of four companies as one of the predominant drivers of offshoring innovation-centered functions.

Innovation and knowledge/analytical services encompass everything from engineering support to prototype design to materials research to credit analysis (see Exhibit 4). These services are more complex and client-specific, and they require

Exhibit 3

Access to Qualified Personnel Drives Companies to Offshore Innovation



Sources: Duke University Offshoring Research Network and Booz Allen Hamilton 2006 Corporate Survey

Exhibit 4

Innovation and Knowledge Services Include Many Highly Skilled Functions

Innovation services include…

Engineering:
- Engineering support
- Embedded systems development
- Testing
- Reengineering
- Simulating
- CAD drawing
- Drafting and modeling

NPD:
- Prototype design
- Product development
- Systems design
- Application development
- Product development
- Support services

R&D:
- Programming
- Code development
- Development of software for managing processes and product design
- Development of new technologies
- Research on new materials and processes

Knowledge/analytical services include…
- Performance analysis
- Industry and company analysis
- Market analysis
- Credit analysis
- Data mining
- Equity analysis
- Forecasting
- Risk management analysis
- Financial planning

Source: Duke University Offshoring Research Network a deeper, more analytical skill set. Therefore, they are not as easily or rapidly commoditized, and they command a premium.

In addition to offering the highest profit margins to service providers, these high-end services drive the highest savings to clients. In fact, so significant is the benefit to clients, our survey indicates that service providers actually underestimate the savings they generate for clients in these service areas (see Exhibit 5).

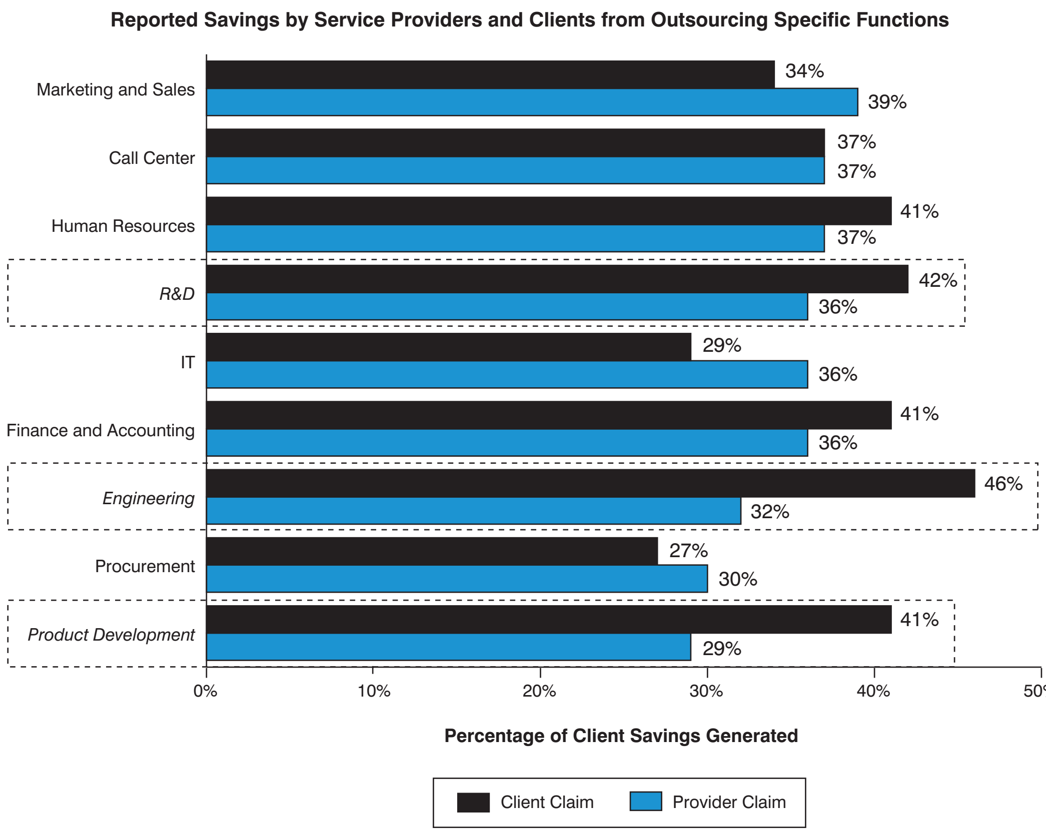
However, innovation and knowledge services are hard to scale because of the high degree of client customization. They have to be run differently—not according to the traditional factory model used for BPO and ITO services. It will take time before these services can be modularized, much less standardized. Until then, companies should conduct a careful vetting process when outsourcing these services. They will need either to choose select providers that are able to commit to the customized investments required, or be willing to make investments in setting up captive or virtually captive operations.

3) Size Matters: Smaller Can Be Swifter

Most people familiar with offshoring are aware of the big brand names in the marketplace. However, there is a growing universe of smaller players that often specialize in niche, high-end services. In fact, our survey shows that these small providers, in some cases, could outperform the larger "name" firms in talent acquisition. The firms that are more nimble and more tied into networks of outside expert contractors are at an advantage in some cases, as they are able to bring a

Exhibit 5

Clients Claim Greater Savings Than Service Providers in Innovation Services



Note: Client responses were gathered during the 2006 survey.

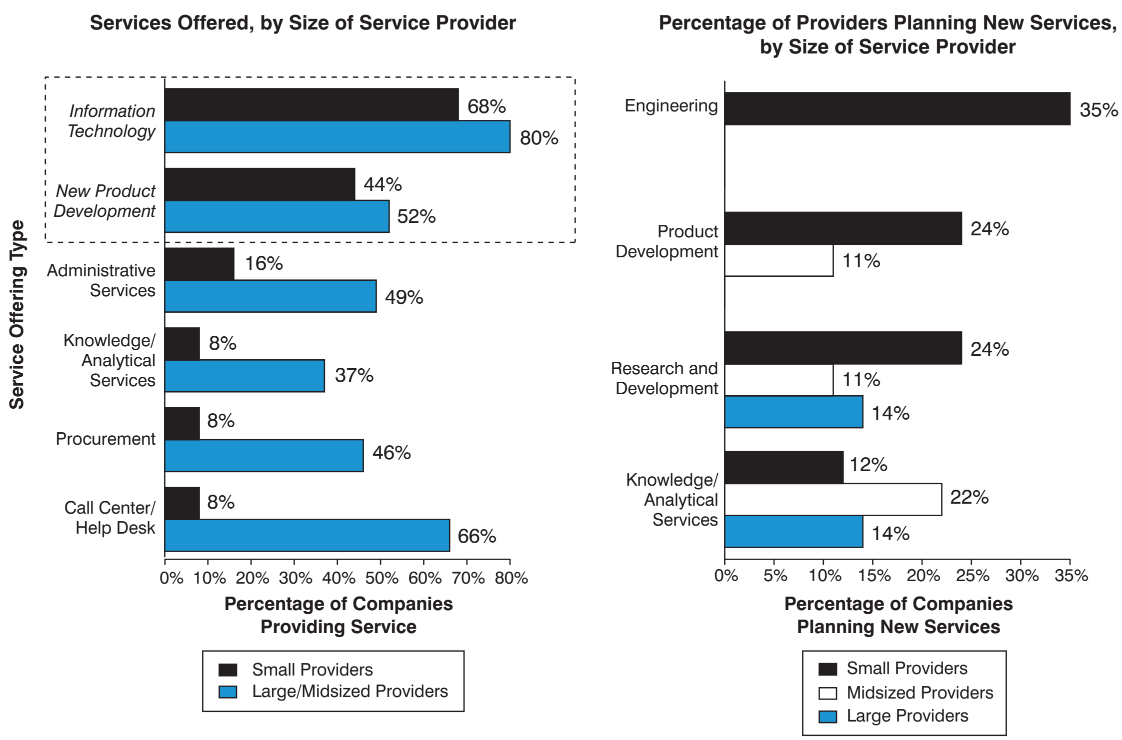
Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company; Duke University Offshoring Research Network and Booz Allen Hamilton 2006 Corporate Survey customized and highly specialized array of skills to the table. Not surprisingly, our survey reveals that small service providers have eschewed call center and administrative services work and targeted high-margin, knowledge-intensive services such as new product development, engineering, and R&D (see Exhibit 6).

We say "smaller can be swifter" because smaller service providers can be more nimble and can more successfully attract and retain highly skilled talent, thus ramping up new service offerings more quickly. As Exhibit 7, page 8, demonstrates, small providers employ proportionally more employees with master's and Ph.D. degrees. Moreover, they are able to recruit specialized staff more quickly. The small providers that responded to our survey were able to recruit Ph.D. candidates in a matter of six weeks, as compared to 14 weeks for midsized and large providers. They hired candidates with master's degrees in four weeks, compared to nine weeks for bigger shops. As offshoring matures, speed of implementation and flexible specialization will only become more important as sources of competitive advantage. These attributes favor the small.

Our research and experience in this field lead us to conclude that large competitors will find it difficult to duplicate the advantages of small firms in this space, even if they acquire them. The traditional BPO/ITO "body shop" approach will not work. Instead, large service providers would do well to manage innovation and knowledge businesses as standalone entities that have the flexibility to hire specialized talent and make the client-specific investments necessary for long-term success in these businesses.

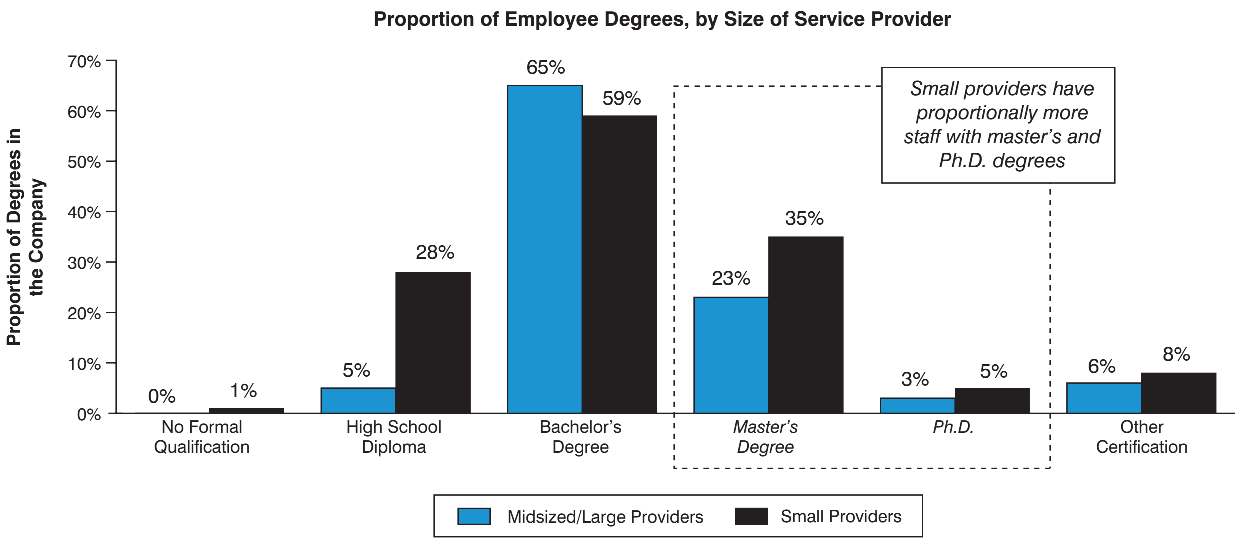
From the perspective of companies sending services offshore, the challenge in offshoring these high-end, specialized services is formidable and the risks that attend failure

Exhibit 6
Small Providers Specialize in Knowledge-Intensive Services



Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

Exhibit 7
Small Service Providers Employ a More Highly Educated Staff



Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

substantial. Yet companies that use offshoring services, both Booz & Company clients and survey respondents, persist in off-shoring innovation and knowledge services, because they simply cannot find sufficient talent onshore.

When companies seek the highly skilled talent contained in the small, specialized shops, they will have to stitch together a network of providers that can support their various innovation and knowledge/analytical needs. It won't be easy; companies are barely able to integrate their existing BPO providers into their business model. Incorporating the input of multiple offshore providers in product development and intellectual capital design poses a serious threat to the existing order at most companies.

Companies need to start thinking about these issues and anticipate how they will reorganize to tap distributed pools of talent in dispersed locations. One solution is anticipated in "Captive in a Box."

4) Service Providers Join in the Global Race for Talent

The scramble for talent in far-flung markets is just as real for service providers as it is for their clients. The same scarcity that drives com-panies to offshore makes it increas-ingly difficult for offshore service providers to find qualified talent.

Providers are expanding their geographic footprint as client expectations of "near-shore" sup-port grow, but they are also casting about in search of the highly skilled talent necessary to fulfill clients' growing innovation and knowledge service needs.

Finding and managing talent is becoming the single biggest issue (and source of competitive dif-ferentiation) for clients and service providers alike (see Exhibit 8).

As the 2006 Duke–Booz Allen Hamilton (now Booz & Company) survey of companies purchasing services offshore revealed, the early bird catches the worm. The companies that do not move now will struggle to secure coveted talent in the future. Leading global enterprises are already developing comprehensive workforce-planning strategies to acquire, develop, and retain talent in key markets around the world. These plans anticipate human capital needs for the next one to three years, taking into account factors from corporate strategy to infrastructure capabilities to industry activity to social responsibility.

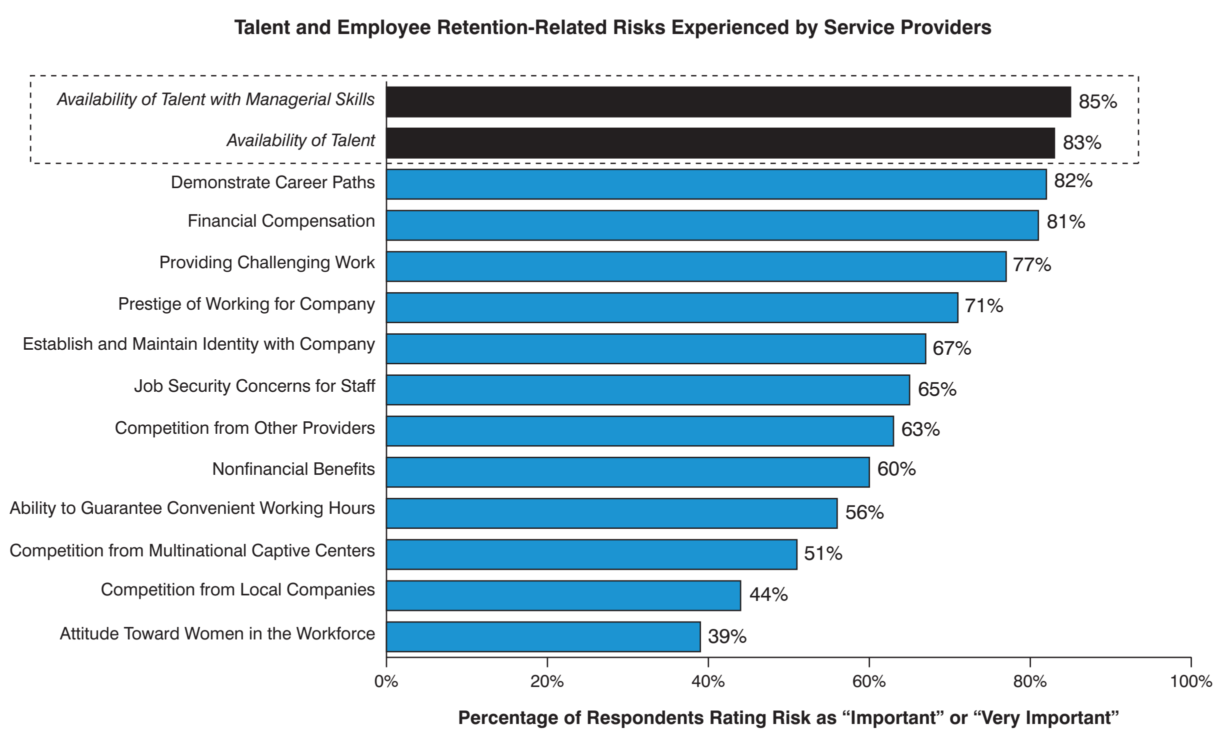
To locate and bring on board the specialized talent they will need in

Service Provider Case Study: Captive in a Box

Until recently, only Fortune 500 companies had the resources and scale to gain the cost and control advantages of a captive offshore operation. Now, however, small and medium-sized firms can reap these benefits: There are a growing number of small service providers that specialize in setting up specialized captive offshore operations for small to midsized companies, or for large companies testing the market. Given that this is all they do, these providers can dramatically reduce the start-up costs involved for their clients (e.g., real estate, recruiting, and legal and tax planning).

One firm, QuickStart Global, has tapped niche talent pools from India to emerging locations such as Nicaragua and Bulgaria to provide its clients with specialized consulting, office setup, staffing, and ongoing support services for small captive operations of anywhere from four to 40 people. These services enable the client company to enjoy cost advantages and access to talent by offshoring its back-office functions to a virtual captive operation, while retaining full control over management, including training and retention programs. This is a critically important element, given the high rates of attrition in attractive offshore markets. Clients win in three ways: They get access to global talent pools, bring their average labor costs down, and are able to accommodate more work with an expanded staff, thus driving greater revenues.

Exhibit 8
Service Providers Face the Same Dearth of Talent as Their Clients



Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

myriad countries, companies will rely to a greater extent on local service providers more familiar with particular talent markets. Because these service providers are themselves confronting the same labor constraints that companies face, we will see more and more stitched-together talent networks that span the globe. Collaboration in a globally distributed enterprise will "follow the sun," meaning that work that starts in the U.S. will continue in India, be completed in Eastern Europe, and get handed back to the U.S. on a true 24/7 basis.

Bridging time zones and cultural divides to work together productively will be a challenge. Even simple issues like getting people from different time zones to agree on the timing for a conference call requires significant coordination and effort; collaborating on product design and development will be even more taxing.

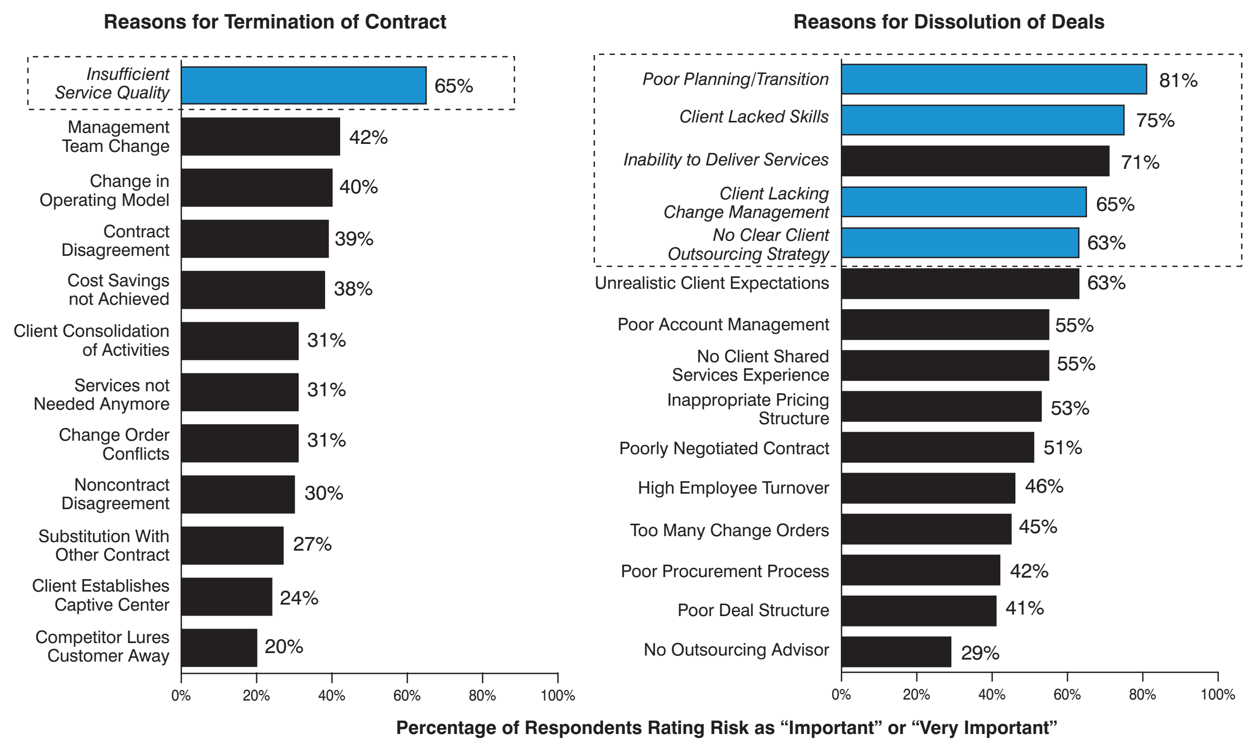
5) Collaborative Management Models Will Crack the Code on Quality

Although providers talk a good game about their process reengineering abilities and their high-end service capabilities, our survey data indicates that they are far from cracking the code to delivering consistently high service quality. That said, clients share the blame for deals dissolving, as they often fail to establish clear expectations and appropriate governance mechanisms. Chief among the reasons cited by service providers for deals falling apart are poor transitioning, lack of skills on the part of the client, poor change management, and no clear client outsourcing strategy (see Exhibit 9). Providers do concede, however, that their own "inability to deliver services" also plays a major role.

In short, clients and service providers have not found a way to collaborate in building and managing common business processes and achieving shared objectives. They have not landed

Exhibit 9

Delivering Sufficient Service Quality Continues to Be a Major Challenge, Primarily Because of Poor Governance/Management Models



Sources: Duke University Offshoring Research Network 2007 Service Provider Survey; Booz & Company

on the right mutually workable management model. The generally espoused model of the client tasking the service provider with a list of deliverables spelled out in a contracted service level agreement (SLA) and then walking away is the stuff of textbooks—and fairy tales. Corporate management cannot hand off a checklist and return to "more important" matters; they must stay engaged.

Clients and service providers need to develop new, collaborative management models that share responsibilities, risks, and rewards and enable both parties to achieve their objectives. In this new model, service providers need to engage with clients to comanage the contracted work. Moreover, both providers and clients need to invest in client-specific training for offshore employees, not only to achieve greater savings and satisfaction for the client, but also to help the provider retain talent and realize higher revenue growth rates. Clients need to recognize the investment service providers will be making to reengineer processes and increase their employees' skills. They cannot assume that the savings from offshoring will continue if they do not also invest in developing and testing new approaches and take on a fair amount of the risk. To achieve a significant payback in process efficiency, quality, and consistency, companies and providers must make significant up-front investments (see "Building a Global Engineering Network").

The Globally Distributed Enterprise of the Future

The practice of outsourcing and offshoring is no longer a labor arbitrage strategy; it is a game changer, enabling the necessary transformation of multinational organizations into nimble, global competitors. Furthermore, this transformation to a globally distributed talent enterprise is no longer a strategic choice exercised by a select few large corporations. It is now an imperative, as the world economy's center of gravity migrates to the emerging markets of China and India, and, to a lesser extent, Russia, Brazil, and South Africa. No company can afford to ignore these burgeoning consumer markets, which already overwhelm those of the United States and Europe. Nor can they disregard the highly skilled talent pools in these regions, which swamp those of the industrialized economies.

The promise of a new, globally distributed organizational model

Client Case Study: Building a Global Engineering Network

A major automotive supplier reconfigured its engineering organization to create a collaborative management model and realized a 20 percent reduction in its engineering spend as a result. This company confronted a host of challenges, including pressure to cut costs from original equipment manufacturers (OEMs) in North America and Europe; gaps in its ability to support growth in Asia; a shift in its supply base to China and India and an accompanying need for local supervision; and a dearth of U.S.-based engineering resources in key areas such as electronics control and software.

After conducting a thorough analysis of its engineering processes and their relative maturity and risk, the company established global centers of excellence in design, testing, electronics, and other key engineering functions in several emerging markets to cover multiple product groups. Core engineering was consolidated into four centers in the U.S., Europe, China, and India, while applications centers were reorganized around OEMs and other customers. The company also developed plans to locate a testing center in Eastern Europe and an embedded center in India to serve global needs. The result—in addition to 20 percent savings in engineering spend—is enhanced quality, productivity, and warranty management, as well as stronger alliances with local service providers throughout the world.

is that it transcends state borders, enabling a company to "relocate" itself all over the world to leverage the capabilities that will best power growth. Core capabilities are repositioned in new geographic regions, and the enterprise is able to drive growth with equal success in local and global markets. The globally distributed company differs fundamentally from the paradigm of the past, in which multinational companies set up business units around the world staffed by expatriate managers, while controlling strategy from a central headquarters location. In the globally distributed enterprise, multinational firms shift the locus of internal power to growth markets and tap capabilities throughout the world to breathe new life into maturing markets.

The next-generation company will be led by the best people available from across the globe, and its culture will reflect a diverse mix of provocative and powerful influences. This organization will unleash the flow of information, recognizing that more valuable information resides at the edge than in the core of a company. It will source local talent and feed innovation by establishing deep relationships with government, university, and business partners wherever it operates. It will source factors of production from the optimal location, wherever in the world that might be. It will design and develop products with input from all regions, with increasing emphasis on emerging markets where future growth will be concentrated. It will change the world.

The prospect of achieving the globally distributed enterprise is daunting. It is also undeniable.

CONTACT INFORMATION

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