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# Rethinking the Value of Talent

by Jeffrey Joerres and Dominique Turcq

If companies managed financial assets as carelessly as they do human assets, then shareholders, auditors, and regulators would come down hard on them for inefficient use of funds. Yet although it is commonly accepted that individuals are crucial to an organization's success, many companies cannot measure or manage their employees' contributions to corporate value.

Two significant barriers stand in the way of a more productive or strategic approach to recruiting, developing, and deploying employees. First, many managers are reluctant to categorize people, for fear of appearing elitist. Second, human resources departments typically classify individuals according to the functions or the business units — the *vertical* silos — in which they work, not how essential their roles are, or what experience or other personal qualities are required to perform the role. No attempt is made to classify people *horizontally* across functions or business units, according to how “business critical” they are. And even when a company does consider an individual's contribution to the success of the organization, it is all too often limited to a discussion about performance rather than organizational measurements of success.

We believe that businesses need a far better understanding of the strategic value of employees; it is critical to success in the global

marketplace. A company's future growth and competitiveness depend more than ever on attracting qualified workers — an increasingly scarce resource — *and* helping them work efficiently together within the organization. Business organizations are like theater troupes: Their success depends on timing and on every person executing his or her role, whatever it may be.

Consequently, a strategic approach to managing the value of employees first requires a definition of the roles that must be performed on the corporate “stage.” This means creating a taxonomy of jobs within the corporation that is consistent across business units, countries, and functions and is divorced from the individuals working at these jobs. As far as the organization is concerned, an employee is first and foremost expected to fulfill a function, with a number of tasks for which a number of skills are required. Some of these tasks are technical and some are related to the employee's relationships with coworkers and outside agencies.

A bank teller, for example, must be able to handle simple transactions and be courteous; a chef should be a good cook, act as a team leader, and have a reliable reputation; an airline pilot is expected to fly a plane well and facilitate the aircraft's rapid turnaround; and a production worker must perform a set of technical tasks and meet ISO quality standards in doing so.

Once the different roles have been defined, management is in a

position to determine how important each is to the company's ability to create value for customers and shareholders. In theater language, it's the determination of which roles should have top billing and which can be played by character actors.

Certain jobs have a greater *value impact* on an organization; there is a substantial risk to financial performance or reputation if these tasks are not performed well. In some cases, but not all, these jobs merit higher compensation. Other roles carry a significant *cost impact*, because they require a good bit of training, development, and skill complexity to be performed adequately. These roles almost always command the highest salaries in the organization. (See Exhibit 1.)

On this basis, we can classify an organization's roles into four broad segments, each of which requires a significantly different talent-management approach.

- **Creators** devise and implement an organization's distinguishing value proposition or business model. They include senior executives and the chief designer in a

fashion house. These are scarce resources with skills that take a long time to acquire and are costly to develop and maintain.

- **Ambassadors** represent the organization's public face and are responsible for customer experience. Among other positions, they are bank tellers, supermarket cashiers, nurses, and field installation technicians. In most cases, these workers are easily replaceable and their skills do not have to be particularly sophisticated, but if they don't do their job well, the business can suffer significantly.

- **Craft Masters** ensure the quality, timeliness, and cost-effectiveness of an organization — the essential ingredients for the faultless execution of a business strategy. These are the design engineers in a high-tech business, the "nose" of a perfume brand, the whiskey blender in a distillery, and the auditor in an accounting firm.

- **Drivers** keep the business running. They are assembly-line operators, back-office agents, and administrative assistants. Although they are neither crucial to the success of a venture nor hard to hire, in most companies they represent the largest category of human capital, and bad management of this group can lead to operational disruption or quality problems.

In our system, the differences among these four segments are expressed in terms of talent valuation — such attributes as knowledge, experience, skills, and personal interaction capabilities — and not in terms of organizational structures (such as business units) or in human resources management terms (such as age, education, seniority, or compensation). This concept for strategically managing the value of

employees brings human resources approaches to a new level.

Basic management processes — sourcing, development and training, compensation, retention, and separation — are conceptually the same for all four employee segments. However, since each segment differs in how critical it is to an organization's success, the practical tools used in applying these processes will also differ. Take sourcing, for instance. Depending on a company's business model and operational plans, employees in some segments, such as Creators and Ambassadors, are generally hired and trained as part of the permanent corporate head count. In other instances, however, Craft Masters, Drivers, and sometimes even Creators are structurally (though not organizationally) less closely integrated into the organization. Instead, they are brought on as temporary or contract staff or engaged as independent consultants.

After the right people are cast in the right roles, they must be managed in different ways, according to those roles. For example, consider two training officers, Jill and Jack. Jill is highly professional, and her training efforts are almost always successful; she is a Craft Master. But Jack is more creative and is expected not only to train staffers well but also to improve the quality of the teaching materials. He was hired through a headhunter, is paid more than Jill, and knows that he is depended upon to expand the limits of the training organization. Jack is a Creator. Jill and Jack have the same job title and, in general, do the same work. But Jill and Jack are in separate business-critical categories, thus their salaries, evaluations, and promotions must be handled differently.

### Exhibit 1: Organizational Roles

A business is like a theater company: Each employee has a role that contributes to the organization's value.



Source: Manpower Inc.

Dealing with employees in this way can be a complex balancing act for management. But it is exactly what every manager already does — or should do — every day. For example, the manager of an opera house must continually handle a number of distinct segments of people: the singers, the conductor, the casting director, the cast, the musicians, the bartender, the box-office cashier. To do this, he uses varied sourcing techniques, compensation principles, and motivational approaches in a relatively instinctive way.

Yet in many cases, the very rules and procedures of an organization can be obstacles to segmentation and a force for “averaging” the treat-

ment of individuals’ roles. This tendency is a dangerous handicap that makes it impossible to measure the value of employees and, ultimately, to compete successfully in the global marketplace. +

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How did Cisco come to share this inside information? In the past, Cisco’s engineers and architects felt, often correctly, that most customers and prospects simply wouldn’t understand their internal, informally assembled aids. However, Cisco had several highly sophisticated customers who weren’t satisfied with “solutions”; they wanted to see and understand the thought process behind the company’s proposals. Were these architectures really the best or most cost-effective that Cisco had to offer? So Cisco began showing these customers its in-house simulations. And the customers, in turn, expressed a desire to adapt these design, configuration, and optimization models for their own use.

Cisco’s marketers and innovators had not expected this. But they swiftly grasped the implications. With some thought and polish, they repackaged these tools as customer design interaction platforms. Instead of simply “selling” customers on a complete design, they now conduct collaborative meetings in which prospects literally see and play out the architectural implications of their network priorities.

“We’ve found that when we share our tools with customers rather than just demonstrate how much we’ve improved our technologies, we learn a lot more,” Randy Pond, Cisco senior vice president of operations, processes, and systems, told a Cisco CIO customer workshop in 2004. “Several of you have become true partners in design with us.”

There are conversion costs to changing improvised internal work tools into products accessible by external nonspecialists. But the challenge forces a valuable cultural change: Technological innovators become far more aware of and

## My Customer, My Co-Innovator

by Michael Schrage

**W**hat portion of your cell phone’s myriad features do you use? Market research shows that most mobile phone owners use less than 20 percent. The innovation that matters isn’t what the innovator offers; it’s what the customer adopts. And as organizations recognize this, they’re starting to use their customers as a source of innovative introspection.

In industry after industry, a shared model for innovation adoption is emerging. The most valuable “platforms” — the tools and technologies used internally to discover, design, and test new products and services — can be creatively and cost-effectively sold or lent to customers, clients, and prospects. Cus-

tomers get a chance to “try before they buy.” They can adopt and test new ideas and technologies before investing in them. And the purveyors of new technologies rapidly gain insights into the potential value of their wares — insights that might otherwise take years to gather.

One company that understands this is the networking giant Cisco Systems Inc. Over the years, Cisco’s architects and engineers have developed scads of internal tools that allow them to design, configure, optimize, and compare alternative network infrastructures. They often run sophisticated simulations, for example, to determine the number of routers and switches to recommend to customers, or to show prospects how a proposed implementation might work.

empathetic to customer needs and constraints.

Cisco's example may not be typical, but neither is it rare. Procter & Gamble has begun to share some of its computer modeling and market research techniques with Wal-Mart, Tesco, and other distribution channels. This includes the celebrated P&G "moment of truth" research, which tracks consumer attitudes at two critical times: when the product is chosen and when it is used. To be sure, many of P&G's biggest distributors are also rivals that offer their own private labels, so there are risks to sharing this type of proprietary innovation platform with them. But the rewards are even greater: They include ongoing close ties with retailers, who often share their own innovative tools for analyzing (for example) how store layout, shelf space, and signage influence purchase decisions. Together, these manufacturers and retailers can develop a relationship that transcends any particular innovation tool or technique.

The world's top investment banks, meanwhile, profitably peddle tens of billions of dollars' worth of complex financial instruments, such as synthetic securities and derivatives, every year. Even sophisticated customers, such as Fortune 1000 companies and hedge funds, are often understandably reluctant to take a chance on new financial instruments. So the banks now give their customers the same computerized "wind tunnel" and "stress testing" algorithms that their own quantitative analysts have used to design the products in the first place.

"In the early days, we would run simulation after simulation demonstrating that our instruments would help them better hedge their

risks," acknowledges one former Goldman Sachs and Salomon Brothers executive. "But, frankly, they didn't fully trust either us or our simulations. It wasn't until we started giving them the simulation tools we used ourselves that they took us seriously."

These free simulators proved to be the most profitable innovation that the Goldman Sachs derivatives group launched. Soon, clients began asking for custom derivatives and other tailored instruments. "Without the simulators, customers would never have known what to ask for, and we would never have thought to ask," recalls the bank executive. Yet, despite its success, this innovation

with a few of their customers to see how they used it," he recalls. "They immediately said no. I think they were afraid that it would put their customers in a better position in negotiating with them."

But in practice, companies that externalize internal tools typically acquire greater external influence. Moreover, the ongoing digitalization and virtualization of design-and-test innovation tools ensures that a wealth of externalization options will grow. The business goal, however, is not to make a profit by selling internal techniques; it's to alter the innovation ecosystem, making it easier, safer, and more advantageous for suppliers and cus-

## Cisco, P&G, and Goldman Sachs share their computer modeling techniques with customers.

appeared nowhere in the bank's R&D budget or prospectus. It was only a tacit, not an explicit, locus of value creation.

Of course, many companies resist the idea of bringing in customers as innovation partners. Eric von Hippel, head of the Innovation and Entrepreneurship Group at the Massachusetts Institute of Technology Sloan School of Management, hypothesizes that internal innovators frequently view customer innovators as rivals who might undermine their creative role.

Professor von Hippel recalls a chemical company that devised a software program to calculate which forms of plastic were most appropriate for packaging such different foods as strawberries, fresh meats, and frozen vegetables. "I told them that they should share that program

tomers to take a chance on one another's work — and to learn far more about each other, and themselves, in the bargain.

To externalize innovation, organizations must add value to tools they've already designed, developed, and deployed. To do this, companies need to audit the very tools they most take for granted and see how — or whether — they should be externalized. That kind of introspection may be the most customer-oriented innovation a company can make. +

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# The Well-Designed Global R&D Network

by Thomas Goldbrunner, Yves Doz,  
and Keeley Wilson

**C**onsider the two faces of the global innovation movement. Company A, having grown through acquisition, produces multiple brands for multiple markets and operates a worldwide network of research and product development centers. Each of its R&D sites was initially responsible for its own brands and local market, but with globalization these distinctions have lost their importance.

Company B, on the other hand, was built largely through internal growth and has two global brands. It operates one primary R&D center supported by a handful of special-purpose sites around the world. This comparatively sparse network has helped Company B win wide admiration for the efficiency of its engineering.

Because expanding the number of nodes in a network exponentially increases its complexity, it is not surprising that Company A's R&D structure is more expensive to operate. Company A has considered closing some sites, but has resisted doing so because it fears losing capabilities and insights, and roiling local markets. Meanwhile, incremental budget cuts have chipped away at engineer and supplier morale. Having built its network to maximize the value associated with market access, it is now forced to manage the network for cost.

Most global innovation networks look like Company A's —

and suffer the same problems. Company B's R&D structure is clearly more productive, but it is not necessarily ideal either. Its network might be too compact, limiting its access to knowledge that could maximize its performance. Thus, to identify principles and practices for creating a truly well-designed innovation network, Booz Allen Hamilton and INSEAD, the international business school, surveyed R&D leaders in 186 companies in 19 nations in 2005. The survey results, and our own experience, suggest one central truth: Organizations benefit when they configure their innovation networks for cost and manage them for value. (For an in-depth look at the survey results, see [www.strategy-business.com/media/file/global\\_innovation.pdf](http://www.strategy-business.com/media/file/global_innovation.pdf).)

The survey respondents, who together account for nearly 20 percent of global corporate R&D expenditures, clearly understand the problems that arise in overseeing a bloated, competitively disadvantaged innovation network. They named what they view as the primary R&D challenges: assessing the value of new knowledge, encouraging cross-site and cross-functional collaboration, managing the complexity of global projects, and optimizing innovation footprints. They also emphasized that having a well-managed R&D network is becoming particularly advantageous as companies expand R&D beyond their home turf. Between 1975 and 2005, the survey found, the share of R&D sites located outside the mar-

kets of their corporate headquarters has risen from 45 percent to 66 percent. That share is likely to increase, with 77 percent of the R&D sites planned over the next three years slated for China or India.

In the face of such obvious need to disperse innovation networks despite the risks, how can companies ensure that they configure their new networks for cost? First, they can accept that there are only two valid reasons to add a node: 1) to cost-effectively access critical knowledge that could not otherwise be tapped, and 2) to locate capabilities where they can deliver results better, faster, and cheaper than anywhere else in the network. Compared with traditional innovation networks, these leaner, more consciously designed networks can achieve 37 percent faster time-to-market and lower costs by 24 percent, according to estimates based on the aggregate experience of survey participants. In addition, there is a morale benefit when each R&D site has clear responsibilities and stimulating work to do.

Second, a well-planned multi-site network needs organizational processes and tools to foster innovation and collaboration across geographies, cultures, and organizational silos. The "technology innovators" in our survey — those who seek to be first to market and to introduce breakthrough technologies — use a number of hard and soft levers to ensure that their global networks deliver maximum value.

The hard levers are both technical and organizational. On the technical side, they include common product and component architectures as communication platforms that give global teams a shared language to foster collaboration. On

the organizational side, globally aligned processes, roles, and structures are seen as important; also viewed as vital were cross-location steering committees to manage pipelines and portfolios, and information systems that enable 24/7 flows of knowledge, ideas, and designs.

The soft levers are geared toward evoking and sustaining a healthy innovation culture and attracting and developing talent. Our respondents generally agreed that successful innovation depends on team members who can work effectively in culturally diverse environments. Yet only the technology innovators report that they view an international background as a prerequisite for a senior management role. Accordingly, only the technology innovators put significant effort into developing employees' cross-cultural leadership skills.

The levers of choice in this regard are financial and career incentives to encourage staff to work in different geographies. In fact, few factors operate as powerfully as incentives to influence and reshape organizational culture and work practices. However, it appears that organizations need to do much more to align their incentives with their innovation strategies. Although most respondents viewed accessing new knowledge as central to innovation success, few had deployed incentives to support it. Not surprisingly, then, low-value-added sites, such as those that do nothing but local-market customization, often struggle to retain talented staff. (This challenge is especially acute in markets like China and India.) One solution is to move these sites "up the innovation food chain" by assigning them more complex responsibilities. A site need not have

full development capabilities to be an interesting place to work; it could, for example, be designated a center of excellence for a particular process or technology.

Global innovation networks are an integral piece of the emerging international economic system, but creating networks that deliver real value requires thorough, painstaking consideration. All too often, managers pursue ill-defined economic and political value when creating and expanding their innovation networks, or fail to provide the shared processes and common language the networks need to excel.

A truly lean global innovation network that operates with seamless efficiency across borders and cultures is a rare, beautiful thing. The most powerful levers — cost-effective node location, well-designed product development platforms, an innovation-friendly global culture, and a well-aligned set of incentives — are available to all companies. But companies so rarely put all of them together that creating such an effective network is undeniably a towering achievement, and a notable example of innovation in itself. +

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## The Coming Enterprise Software Shakeup

by **Mitch Rosenbleeth,**  
**Corrie DeCamp,** and **Stephen Chen**

**C**onsolidation may soon render the enterprise software industry unrecognizable.

Five years ago, 11 companies controlled 90 percent of the database market; now only six do. In business applications, the trend is

even more pronounced: Seventy percent of the market is now controlled by just 35 companies, compared with more than 120 companies in 2000. Such high-profile deals as Oracle's recent acquisitions of Siebel and PeopleSoft have left only two vendors to choose from, Oracle and SAP, for top-tier integrated suites.

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Looking solely at the economics, software buyers will be the short-term losers from this merger activity. With fewer companies vying for sales, the industry's traditional 80 percent discounts, which large companies can count on for volume purchases, will be a thing of the past. More commonplace will be 50 percent off list price.

Initially, higher prices will hurt the purchasing companies that depend on enterprise software to coordinate their activities. But in the long run, pricing pressure could change the dynamics of the buyer-supplier relationship and initiate a profound shift in how software is delivered and in the types of programs companies implement.

As software prices rise, many chief information officers (CIOs), particularly those at medium-sized companies, will be unable to afford the huge, one-time hits caused by the purchase of licenses for large programs like enterprise resource planning (ERP) or customer relationship management systems. Instead, they will seek to vary their costs so that their IT budgets grow and shrink along with their needs. That will increase the popularity of subscription pricing, in which companies pay annually for software licenses and reevaluate each year how many software "seats" they require. About 25 percent of software is already sold by subscription; that's likely to increase to more than 50 percent in the next four years. This approach will also speed acceptance of "software as a service," which lets customers access programs via the Web and pay for only the amount of time they use the software. Higher prices could also energize the push to outsourcing, especially for smaller companies.

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In reevaluating their costs and seeking alternatives, CIOs will also explore ways to overcome the growing complexity of their legacy systems. By reducing complexity in application portfolios — that is, by eliminating redundant programs and refocusing data acquisition activities specifically on information needed to enhance competitiveness — these executives can rein in maintenance costs and increase the amount spent on new development. Many CIOs will demand architectural flexibility from their enterprise software providers to minimize the expense of adding and decommissioning applications.

This search for simpler solu-

multiple, fragmented sources.

In response to this demand, as smaller software companies are swallowed up by larger ones, and as top-tier applications migrate into content-rich information systems, the most innovative survivors will develop new industry-specific niche programs that analyze and transform data in real time so that it can be acted upon. For example, many consumer products companies have historically relied on custom solutions to assess the effectiveness of their store promotions and customer discount programs. Today, these applications are being incorporated into ERP and business intelligence software (with varying

higher prices changes the equation enough that customers of enterprise software will increasingly band together and demand both better deals for their industry and customized add-ons to large suites that meet the specific requirements of their sector.

Software purchasers may indeed pay a price for consolidation. But in the end, consolidation could cost the large enterprise software suppliers the most. For a short-term gain in revenue, they may end up having to adjust to a new software landscape that emphasizes customer flexibility; more efficient delivery mechanisms; open standards; the rise of smaller, niche data-centric applications; and greater simplicity. Software purchasers who understand this and take advantage of the opportunity to leverage changing industry dynamics will have the most to gain. +

## “Data-centricity” will transform the CIO into a provider of critical information to the business.

tions and greater adaptability will feed into another noteworthy change in the enterprise software industry — something we call “data-centricity,” which will transform the CIO from a manager of data into a provider of critical information to the business. For example, as software is stripped down, data takes on even greater value as it, not the application, points the way to the next innovation. The software suites, ERP systems, and business process programs are excellent at managing, manipulating, storing, and moving data, but they are not equipped to produce the insights required to outdo the competition in the day-to-day work activities of a data-centric organization. CEOs are demanding data that gives them an end-to-end view of the enterprise — that is, data integrated from

degrees of success). The most inventive marketing software companies will rapidly improve their products, making them capable of providing more granular analysis more quickly, and also ensuring that these programs easily integrate with customers’ ERP systems. The upshot of these activities will be a greater emphasis on standardized platforms combined with hardware and software flexibility, making it easier to change suppliers, programs, and outputs as business conditions shift.

Pricing concerns will drive more cooperation among software buyers. CIO consortiums have been tried in the past, but they often failed; if a company could cut a pretty good deal with a software provider on its own, there was little justification to help a rival get similarly advantageous terms. But the prospect of

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