



HIGHER KNOWLEDGE FOR HIGHER ASPIRATIONS

WAYNE BROCKBANK AND DAVE ULRICH

With escalating expectations and opportunities for HR professionals to add greater value comes the mandate for greater knowledge about the fundamental driving forces of business. Business leaders and employees increasingly assume that HR professionals have foundational knowledge of HR concepts and practices. But to create competitive advantage from that knowledge, HR professionals must be fully versant about external business realities that directly or indirectly influence how to apply that knowledge. We examine four of the most central categories of external business knowledge: advancements in technology, the causes and effects of economic and regulatory turbulence, the dynamics of business globalization, and changes in population demographics. With knowledge about these fundamental business drivers and their supporting data, HR professionals will be more able to make credible and accurate strategic contributions to business discussions and to proactively build more centrally relevant HR practices. © 2005 Wiley Periodicals, Inc.

The aspiration of HR professionals to add strategic value has gained momentum. During the last decade, frameworks and logic have abounded that promote HR's shift to "strategic partnership" (Lawler & Mohrman, 2003), from "partners to players" (Ulrich & Beatty, 2001), and from being "operationally reactive to being strategically proactive" (Brockbank, 1999). Studies indicate that these aspirations now are becoming empirical realities (Becker & Huselid, 1998; Brockbank & Ulrich, 2003).

Fulfilling these partnership aspirations presumes that HR professionals have foundational knowledge about business and the ability to turn that knowledge into HR practices and policies. To be proactive contributors to strategic issues, HR professionals must have knowledge of strategic issues at a depth that is equal to or greater than that of any other line or staff individuals. This knowledge can be delineated into four categories (Ulrich & Brockbank, 2005):

1. Knowledge of theory and practice of HR;

Correspondence to: Wayne Brockbank, Partner, The RBL Group and Clinical Professor, Ross Business School, University of Michigan, 701 Tappan, Ann Arbor, MI 48109, wbrock@umich.edu

2. Knowledge of the needs and activities of internal stakeholders, including management and employees;
3. Knowledge of demands of external stakeholders, including customers and investors; and
4. Knowledge of external realities that influence the above.

Much of the tradition and history of HR has focused on building the knowledge base of HR professionals in the first two categories. More recently, HR professionals have

turned their focus to external customers and investors (Ulrich & Smallwood, 2003). However, awareness of trends among internal and external stakeholders is not sufficient. HR professionals must recognize the contextual dynamics of these trends and be able to connect them to day-to-day work.

HR professionals also must understand the fundamental drivers of business dynamics. These fundamental drivers may be divided into four categories: advancements in *technology* that

enable and mandate greater speed, efficiency, and connectivity; the causes and effects of *economic and regulatory* turbulence; the dynamics in the *globalization* of labor, capital, and work that drive competitiveness and generally improve the quality of life; and changes in population *demographics* that fundamentally define the demand for products and services and the ability of organizations to supply them.

These external realities ultimately determine the relevance and utility of all HR operations. HR professionals, therefore, must be informed about these business trends and realities before they can begin to frame, execute, and create substantive value for their stakeholders. This article examines each of the above four business realities that determine business success and about which HR professionals must, therefore, be knowledgeable.

Each of these trends has direct and indirect implications for HR, which HR professionals

must understand and be able to communicate. Doing so requires more than superficial knowledge; it requires substantive grounding in the data supporting each of the external trends. Without data to substantiate their observations, HR leaders run the risk of being dismissed as superficial and ill informed.

To facilitate the connection between ideas and application, we organize our exploration of key business realities around two dominant questions:

- What trends are associated with each of these business realities?
- What data support the direction and significance of these trends?

Embedded in these discussions are the implications of these trends for HR professionals.

Technology

To align HR strategies and practices with their key constituents, HR professionals need to understand technological trends and have a vision of how technology influences business. Simply stated, technology is *the application of knowledge to the transformation of things into other things*. Technological change impacts business processes, products, services, and information on three dimensions: speed, efficiency, and connectivity.

Speed

In 1965, Gordon Moore, Intel cofounder and one of the inventors of microprocessors, stated that the number of elements in the equivalent space on a microprocessor would double about every 18 months. This statement was initially framed as a projection. In the ensuing years, it has become an implicit goal for Intel as well as for the entire chip industry. In the three decades since 1970, "Moore's Law" has driven roughly an eight-million-percent increase in microprocessing speed (Schlender, 2002).

As a fundamental unit of electronic devices, chips make possible much of what defines our lives—cell phones, laptops, PDAs, TVs, and, increasingly, cars and appliances.

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As the driving force of the Internet, chips allow us to make multiple and concurrent dial-up connections from our computers, to conduct voice and video meetings via the Internet, and coordinate simultaneous engineering and product design on a global scale. As remarkable as these innovations may seem, the wireless revolution is just beginning. HR professionals must help their companies acquire the capabilities to create, respond to, and leverage the speed of technological innovation.

Efficiency

Despite the high cost of building new chip fabrication plants (\$3 billion), companies such as Intel have learned that each new state-of-the-art plant reduces cost per unit by 30%. Putting its money where its logic is, Intel has invested half of its \$4 billion research and development budget on manufacturing technology, with cost efficiency as its primary goal (Schlender, 2002). In the context of such reductions in the cost per unit, the past 30 years has seen the cost per transistor unit drop from \$1 to one-millionth of a cent (Rheingold, 2002).

Dell has taken advantage of technology's contribution to manufacturing processes by focusing on product categories that have moved or can be moved into the standardized portion of their life-cycle curve. Instead of creating the "next big thing," Dell uses technology to make the "current big thing" better, faster, and cheaper. Dell's manufacturing workstations are 400 percent more productive than industry standards, and output in its new facilities is up 40 percent. As a result of many factors that reinforce Dell's process technology, its price-to-earnings (P/E) ratio outpaces that of IBM, Microsoft, GE, and Wal-Mart (Kirkpatrick, 2004). HR professionals can weave technological efficiency into how HR work is done (e.g., e-HR) and to assure that their organization adopts efficiency standards.

Connectivity

Perhaps the most profound outcome of technology is its facilitation of human connec-

tivity. Whether through the Internet or cellular phone, technology is transforming the interaction patterns of people, groups, and organizations on an exponential scale. The implications for organizations and for HR are profound. New blocks of customers, suppliers, employees, and owners can materialize and disappear in a very short time. They can mobilize into action and leverage economic buying power as a block that undercuts pricing; raises product and service standards; communicates satisfaction or dissatisfaction; and imposes substantial pressures on their target organizations (Rheingold, 2002). The following examples are illustrative:

- eBay has turned into one of the great success stories of the Internet (Hof, 2003). In 2003, more than 30 million people sold more than \$20 billion in goods on eBay—a transaction volume approaching that of the world's 70 largest economies. More cars are sold on eBay than in the largest dealership in North America.

Among its 12 million daily listings are toothbrushes, dental floss, and diapers. What makes eBay work? eBay provides the technological context for the nearly instantaneous creation and execution of frictionless markets within a self-regulating global democracy.

- BMW customers use technology to electronically feed their new-car specifications directly to thousands of suppliers and factories. Based on supplier parts availability, distribution information, and original equipment manufacture production schedules, the delivery date of the customized vehicle can be calculated and communicated to the customer in five seconds. Eight percent of BMWs in Europe are now customized in this manner.
- On a company-sponsored Web site, Innocentive.com, pharmaceutical giant Eli Lilly applies Web technology to encourage techno-hobbyists to solve some

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of its most difficult scientific challenges. Users can access the Web site, read about the problem, go to their garage or study, develop a solution, and submit it to Lilly. Those who solve the problem receive substantial remuneration. In this way, Lilly is able to access intellectual capital on a global scale.

- Given the low cost of Web site construction, individuals with complaints about products and services, companies, and politicians can mobilize collective action that otherwise would have been impossible only a few years ago. For example, dissident Disney shareholders established SaveDisney.com to oust the executive leadership and reorient the direction of the company and its values.

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HR professionals can help architect such communities of interest and practice and encourage them through starting and maintaining them.

Economic and Regulatory Issues

While we have some reason for optimism about long-term growth, many economists predict that the economy will become more volatile, with periods of rapid improvement followed by equally rapid periods of decline. Productivity and employment; mergers and acquisitions; social factors; and regulatory requirements are factors driving these changing economic patterns.

Productivity and Employment

The flexibility of the U.S. workforce is one of the primary strengths of its economy—especially when compared to the relative immobility of the workforce in Japan, Germany, France, Italy, and other countries. Such movement enables the United States to move labor from shrinking sectors to growing sectors, thereby encouraging growth where growth is possible and greater productivity where demand is diminishing.

Productivity in the United States is rising dramatically at a time when much low-skilled and middle-management work, especially in manufacturing, is being automated, eliminated, or outsourced. Between 1982 and 2002, for example, steel industry production increased by 35%, while the number of workers decreased by 76% (Schwartz, 2003b). People are the source of this increased productivity, but they must adjust to the fallout that accompanies such increases. While flexibility may benefit the overall economy, it wreaks havoc on the lives of individuals and families. Job loss has an especially heavy impact on older workers, those who have nontransferable skills, or those who are geographically immobile. Displaced low-skilled workers in the manufacturing sector frequently move into the service sector, where low-skilled jobs pay substantially less.

Some people condemn technology-driven productivity as having long-term negative economic impact. The reasoning goes as follows: Technology increases labor productivity, so fewer people are required to produce each unit of output. This causes unemployment that, in turn, reduces consumer spending that, in turn, reduces demand. And the economy goes into decline. This logic makes sense, especially in the short run and in times of recession.

Over the long run, however, empirical evidence suggests the opposite—a positive correlation between productivity and employment. Between 1950 and 2002, real wages grew most quickly and unemployment was at its lowest during periods of greatest productivity (“America’s Fortunes,” 2004). When productivity gains are spread broadly over the economy, they result in higher income per person, cheaper products, and greater competitiveness for the companies that produce them. These outcomes, in turn, increase demand for products and services that, in turn, produce new jobs. This outcome sometimes is referred to as the “virtuous cycle of productivity.” The good news is that this cycle is expected to continue for at least the next five to ten years. And the cycle will be experienced not only by high-

tech firms such as Intel and Dell, but also by low-tech firms (e.g., Wal-Mart), as they apply technology to their operations.

In the context of these trends, HR professionals may add significant value by designing and monitoring productivity improvement programs; coaching leaders on the design of these programs; and enabling employees to respond to them.

Mergers and Acquisitions

Another aspect of the economic environment with direct implications for business and HR is mergers and acquisitions (M&A). M&A activity tends to occur in waves that follow sharp escalations in stock prices. During the 1998–2000 crest of the booming 1990s, M&A activity totaled more than \$4 trillion. This total was greater than the total M&A activity of the preceding 30 years combined. Following a downturn in the capital markets from 2000 to 2002, M&A activity subsided. With the escalation of share prices in 2003–2004, M&A activity is again on the rise (“When Battles Commence,” 2004). The past few years have produced some impressive winners (e.g., Buhrmann with Corporate Express), as well as some fabulous failures (e.g., Healthon/WebMD with Medical Manager). Whether M&A activities result in overall gains in shareholder wealth continues to be hotly contested by consultants and academics alike.

What is generally clear is that, at least in the short run, the share price for buying firms decreases and the share price for selling firms increases. It has been well documented that the failure rate of mergers and acquisitions is well above 50% and that the primary charge of failure has to do with cultural integration. HR can play a leadership role helping companies successfully assess the pre-merger fit of the organization’s cultures and then integrate the human side of merging organizations.

Social Factors

A number of social factors—including education, health, wealth distribution, and the

federal deficit—directly or indirectly influence economic trends. And because they impact people on a very personal level, the responsibility falls to HR professionals (as opposed to accounting or manufacturing) to be aware of these trends and to serve as the in-house experts on these matters.

Education is one of the key drivers of wealth creation and economic well-being for both countries and individuals. It has been widely argued and acknowledged that education has been behind much of the economic success of the United States during the twentieth century (“America’s Fortunes,” 2004). But as the trajectory of educational improvement in comparison with other countries begins to level off, education as a source of national competitive advantage commensurately wanes.

Workforce health, another threatening factor for the U.S. economy, is of growing concern for the country as a whole, as well as for individual companies. The annual 12–15% increase in health care costs is becoming prohibitive for many firms, who are passing the costs on to employees through higher copayments and deductibles. As a result, between 1988 and 2000, the average monthly contribution of U.S. workers to family health care premiums tripled, from \$52 to \$172 (Martinez, 2003). HR leaders face three challenges: how to keep the workforce healthy at a reasonable cost; how to reduce total health care costs; and how to contribute to the national health care debate.

Economic disparity between the rich and poor is another problematic socioeconomic trend. Between 1975 and 1995, real wages for the top 5% of Americans rose 30%, while the bottom half of the U.S. workforce experienced a per-person decline in real wages from \$12.54 per hour to \$10.44 per hour (Karoly & Panis, 2004). Driven by productivity improvements, outsourcing, and immigration trends, the labor supply at the lower end of the economy has increased, further depressing low-skill wages. Under such con-

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ditions, maintaining the integrity of a performance-based financial incentive system is central to maintaining company morale while encouraging performance.

The *burgeoning federal deficit* is a final economic trend that bears watching. Totaling \$44 trillion in 2003, the U.S. federal deficit is at an all-time high and accelerating at an unprecedented rate (Bernasek, 2003). Rising costs of Social Security, Medicare, and Medicaid comprise a huge portion of the debt. With the retirement of the baby boomers just over the horizon, the problem continues

with no end in sight. This situation could make the U.S. investment climate less attractive for overseas capital as large sums go toward the deficit rather than to investing in greater wealth.

HR professionals aware of these social conditions can ensure that their organizations continually monitor the present and future costs associated with these trends and that their organizations are socially responsible and responsive by maintaining an active voice in public affairs.

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Regulatory Issues

Closely tied to economic factors is the regulatory environment in which companies compete. As HR professionals engage in strategy discussions, they may be tempted to assert that economic affairs are becoming more regulated. This is understandable. Compared to other departments, HR departments are usually more involved in regulatory matters. Yet, the last 15 years have seen the deregulation of business on an unprecedented scale in world history:

- *Opening up of world markets.* The destruction of the Berlin Wall, the fall of the Iron Curtain, the increased permeability of China's Bamboo Curtain, and legal reforms in India have deregulated a substantial proportion of the world economy. A good portion of that massive deregulation occurred between 1989 and 1992.

- *Falling trade tariffs.* Tariffs continue to be reduced partially through international economic forums such as the World Trade Organization (WTO), as well as through domestic legislation (Karoly & Panis, 2004).
- *Deregulating national industries.* In response to the demand for high-quality goods and services at lower prices, industry after industry is being deregulated and subjected to market competition. Examples include public utilities, telecommunications, textiles, steel, transportation, banking, agriculture, and even defense.

The good news for traditional Western economies is that these regions of the world are now open to competition; the challenge is that these emerging economies are formidable competitors. Creating corporate cultures prepared to leverage opportunities in a more deregulated world and to respond to dramatically escalating levels of competition is a fundamental charge for strategically focused HR professionals.

Despite these incidents of deregulation on a grand scale, public demand for ethical reform—largely in response to malfeasance at firms such as Enron, WorldCom, and Global Crossing—has led to a number of rulings. Among those rulings is the Sarbanes-Oxley Act that requires corporations to provide stronger governance guidelines, more explicit CEO and CFO accountability, and greater financial expertise among board members. HR's expertise in staffing and performance management may be applied at the board level. In addition, the Public Company Accounting Oversight Board now mandates that corporations provide greater justification for a merger or acquisition. The justification must include a public assessment of both tangible and intangible assets. HR should provide much of the intellectual leadership in valuating economic intangibles.

These reforms do not come without costs. For example, new insurance, legal, and administrative fees could drive up average stock mutual fund fees from 0.43% to between 0.05% and 0.10%. A low-end estimate of charges that could be passed on to investors could easily total \$1.4 billion every year.

Again, HR professionals aware of these regulatory issues may bring the external realities into the organization by creating organizations that can respond to public pressure. In particular, with the increased scrutiny for governance, HR professionals may take a leadership role in auditing governance processes from the board to the shop floor levels. Organization audits will likely become as commonplace as financial audits (Ulrich & Smallwood, 2003).

Globalization

The globalization of products and services has become so pervasive that we take it for granted. Our Nikes (Indonesia), keyboards (Taiwan), winter bananas (Chile), lamps (Mexico), and our toasters (China) are all outcomes of global trade. Even the typical “American” vehicle involves at least nine countries in some aspect of production, marketing, and selling:

Thirty percent of the car’s value goes to Korea for assembly, 17½ percent to Japan for components and advanced technology, 7½ percent to Germany for design, 4 percent to Taiwan and Singapore for minor parts, 2½ percent to the United Kingdom for advertising and marketing services, and 1½ percent to Ireland and Barbados for data processing. This means that only 37 percent of the production value of this “American” car is generated in the United States. (World Trade Organization, 1998, p. 36)

From a business perspective, globalization refers to the movement of goods and services, capital, information, and people across national borders. We examine the extent of globalization, the factors that influence it, and some positive and potentially negative outcomes.

Extent of Globalization

Globalization of goods, services, and capital is increasing at an unprecedented rate. Global trade came close to 25.5% of total

global GDP in 2003 (World Trade Organization, 2003). Although the service sector represents the smaller proportion of the total, it is growing more quickly than the merchandise sector. Between 1980 and 2000, global merchandise trade expanded by 300%, to a total of \$6.4 trillion. During the same time, trade in services increased by 400%, to a total of \$1.5 trillion. And both are growing at a much faster rate than the global GDP.

These trends are likely to continue. Experts predict that U.S. exports will grow 7.8% annually through 2010, and U.S. imports will grow 7.9%. While more pronounced in high-income countries, trade growth is also increasing in middle- and low-income countries at rates of 19% and 8%, respectively (Su, 2001).

Two countries that appear to be benefiting greatly from globalization are China and India. Since 1991, China’s GDP has grown at 8–10% per year, and India has grown at 6% per year. It is projected that by mid-century, India will equal and China will have long since surpassed the size of the U.S. economy (Sachs, 2004).

As might be expected, the flow of capital across international borders and flow of goods and services are highly correlated. Capital flows across borders when nondomestic companies choose to: (1) invest in operations or purchase equity in another country and/or (2) invest in purchase bonds, equity, and other financial instruments in another country (Karoly & Panis, 2004).

Operations and Equity

Nondomestic companies investing in operations or purchasing equity in other companies engage in foreign direct investment (FDI). Such is the case when Shell (based in the United Kingdom and The Netherlands) opens refining operations in the United States or Texas Instruments opens factories in Malaysia. FDI is occurring on a massive scale. As of the year 2000, 65,000 multinational corporations had production facilities

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in approximately 850,000 affiliates outside the country of incorporation (UN Commission of Trade and Development, 2002).

FDI is an important element of the U.S. economy. Between 1980 and 2000, U.S. acquisitions of foreign assets increased six times. This acquisition is small in comparison, however, to the value of American assets owned by nondomestic firms. The value of foreign investments in U.S. operations/equity exceeded the value of U.S. investments in other countries by \$2.4 trillion, or a massive difference of 23% of the total U.S. GDP.

<i>As people migrate across national boundaries, the demographic makeup of countries becomes increasingly internationalized.</i>	<p>Financial Instruments</p> <p>Nondomestic companies may also invest in purchasing bonds, equity, and other financial instruments in countries that are not their own. For example, foreign firms or individuals may try to maximize their long-term returns by investing in the relatively stable but low-return U.S. financial instruments, or they may invest in unstable but potentially high-return China markets. In this way, global capital flow can be healthy for both the investor and investee.</p>
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Unanticipated consequences of FDI can be substantial. For example, when nondomestic creditors hold much of another nation's debt, they may wield undue political influence. In the mid-1950s, the United States forced the United Kingdom to back down from a conflict with Egypt over the Suez Canal by refusing to support the valuation of the British pound. This created a monetary crisis that blocked the United Kingdom's campaign to recapture the Suez Canal. The United States is a net importer of overseas capital to the tune of more than \$500 billion a year. Currently, Japan and China hold so much U.S. debt that they could conceivably influence American fiscal policy and, eventually, its foreign policy.

Globalization of information combines insights and knowledge from multiple sources to make the whole of human knowledge greater than the sum of the parts. This synergistic

effect is nowhere more apparent than in the expansion of the Internet. In 1990, there were one million Internet users, mainly in North America. By early 2004, there were 300 million active users around the world who spend an average of 26 minutes on the Internet every day of the month (ClickZ Network, 2004).

One of the founders of computer technology, Douglas Engelbart, suggested in 1983 that connectivity would substantially raise the collective IQ of integrated institutions through coordination, leverage, and synergy (Rheingold, 2002). His prediction rings true. Recently, a well-known industrial product company established a major R&D center in India. Within a short period of time, using extensive Web-based communication between Indian R&D experts and operational units in Europe and the United States, the company was able to generate a set of plant designs and production processes that will help this company maintain its intellectual as well as its manufacturing competitive advantage.

Globalization of labor takes place through migration—migration of people and migration of work. As people migrate across national boundaries, the demographic makeup of countries becomes increasingly internationalized. Cross-border movement of labor tends to be from south to north, from poor to wealthy, and from less stable to more stable. In 2002, 175 million people, or 3 percent of the global population, were living in countries other than where they were born. Between 1995 and 2000, immigrants have moved into European countries at the rate of 800,000 per year. During this same period, 1.4 million people have come to live in the United States (Karoly & Panis, 2004).

However, the dominant impetus for globalization of labor is not through the migration of people, but through the migration of work from one country to another as companies organize work on a global scale or outsource operations to nondomestic locations. In order to increase the speed, quality, and efficiency of the process, companies are organizing cross-border work. For example, automotive engineers in Detroit may begin

working on a design project. At the end of their workday, they pass the work to engineers in India and Japan. At the end of their workday, Indian and Japanese engineers pass their work on to British and German engineers, and so the cycle repeats itself.

Companies are also moving work to offshore subcontractors, wholly owned foreign subsidiaries, or large-scale offshore suppliers. Estimates indicate that by the end of 2005, 600,000 jobs will go offshore. The numbers will increase to 1.6 million by 2021 and to 3.3 million by 2015 (Schwartz, 2003a). Outsourced jobs run the gamut of vocations, including financial analysts, office and technical support, sales, middle management, architecture, legal services, art and design, life sciences, information technology, and general business. Bank of America has moved 3,700 of its 25,000 technical support and head office jobs to India, where the wages are \$20/hour instead of \$100/hour in the United States. Massachusetts General Hospital sends its digitalized CAT scans to be analyzed by Indian radiologists, who are some of the best trained in the world and who provide overnight service at a fraction of the cost of U.S. radiologists.

HR professionals not only need to be aware of globalization, but they also must learn how to deal with it on many fronts. They need global sourcing strategies to access the best talent worldwide; they may need to create the cultural capability within their companies to engage in business with China and India; they need to design global organizations to ensure flow of information across borders; they need sensitivity to local work conditions and practices while maintaining global standards; and they need to adapt basic HR practices (e.g., in compensation) to local conditions.

Factors Impacting Globalization

In the churn of today's external business realities, several factors encourage businesses to become more global:

- *National comparative advantage.* Each country, depending on its resources, has

an advantage relative to the capabilities of other countries. Resources occur naturally (e.g., land, natural resources, and population size) or are created (labor skill, technology, government policies, and work cultures). The more fortunate countries leverage what they do best, relying on the less fortunate countries to create value in the sectors in which they comparatively excel. In this way, the fortunate and less fortunate countries both benefit from foreign trade.

- *National self-interest.* It is ironic that over the last 50 years, the world has become more politically fragmented and at the same time more economically integrated. In 1946, there were 75 nation-states in the world; in 2002, there were 191 (or 192, if Taiwan is counted separately from China). Once established, countries seek their respective self-interests in a variety of ways, including through the globally integrating involvement in foreign trade.

Each country, depending on its resources, has an advantage relative to the capabilities of other countries.

- *Cost reductions in transportation, freight, and communication.* Between 1950 and 2000, air transportation costs have dropped about 60%; sea freight costs have gone down by 20%; and both digitalized voice and data communications have dropped to fractions of 1% (Hufbauer, 1991).
- *Substantial tariff reductions.* In both developed and high-income nations, tariffs have decreased by 50% between 1986 and 1999 (Newfarmer et al., 2002). Tariff reductions reward effective and efficient producers and generally enhance the overall quality of life in participating countries over the long run.
- *More sophisticated job design.* Through lower-cost communications and transportation, companies are able to split up the value chain and allocate work to the locations where it can be carried out at the highest quality-to-cost ratio. This trend occurs under a variety of different vernaculars, including vertical trade,

multinationalization of production, slicing up the value chain, and disintegration of production.

As these global factors increase, HR professionals will need to realize that any work they do must be aligned to global opportunities and challenges.

Outcomes of Globalization

There is almost always a good news and a bad news outcome of global trade. The net

good news is that most economists agree that, on the whole, the world is better off with foreign trade than without it. However, there potentially are negative consequences.

Economic relationships and interests interrupt and threaten traditional sources of information and social norms.

Job Losses and Gains

Jobs may be lost to countries with skilled workers who are able to process digital information and transact administrative or other such tasks at lower costs. However, other sectors—such as agriculture, transportation, and entertainment—benefit from job creation associated with foreign trade. This is not to detract from the substantial pain of those who have to move their jobs or change their careers. But it does suggest the need for a balanced perspective.

Keep in mind that most job losses do not occur because of globalization. Between 2000 and 2003, the United States lost 2.7 million jobs—only 37% of which was due to outsourcing. The majority of losses have been due to increases in technology-driven productivity. A 1% increase in productivity costs approximately 1.3 million jobs. With productivity increasing at rates of 3% to 3.5%, the impact is self-evident (Neumark, 2000).

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Fallout of Offshore Labor Practices

Companies that do business overseas will do well to attend to the political and social fallout of labor practices, particularly in low-in-

come countries. Since 1997, the Fair Labor Association has been monitoring what it perceives to be unacceptable labor practices by U.S. companies in developing countries. This has prompted some companies (e.g., Nike, Levi, Adidas, and Van Heusen) to go public with their offshore labor practices. Other companies have chosen to disregard their example.

Positive and Negative Influences on National Sovereignty

Many countries experience both positive and negative effects on national sovereignty due to international governing bodies such as the World Trade Organization and the United Nations. Regional trade agreements (e.g., the North American Free Trade Agreement, Southern Common Market, European Union, Common Market of Eastern and Southern Africa, and Association of Southeast Asian Nations) have proliferated and are hotly contested for both their positive and negative outcomes. Economic relationships and interests interrupt and threaten traditional sources of information and social norms.

Social Justice Concerns

Does globalization benefit poor countries, and, if so, does it benefit poor countries as much as it benefits rich countries? Most countries experience better economic conditions because of global trade. With very few exceptions, the average income per person is higher where trading levels are higher. Most of the exceptions are countries whose economic disasters result from ill-advised domestic policies (Dollar & Kraay, 2001). Low-income countries that do not open their products and financial markets to foreign exposure are more likely to experience severe economic consequences than those who join the economic community (World Bank, 2002).

While rich and poor countries both experience economic benefits from globalization, globalization is also associated with the increased disparity between rich and poor

countries (Birdsall, 1998). In 1900, the ratio of the average richest country to the poorest was 9:1; in 2000, the ratio was 60:1.

In meetings where issues like outsourcing, job design, and globalization of work process are discussed, HR professionals should be both conversant and insightful about the issues, the supporting data, and their implications. This might mean being sensitive to globalization and its impact on specific companies, to local conditions (e.g., holidays, compensation and hiring practices), and to increasingly global standards (e.g., culture, talent development).

Workforce Demographics

To be fully contributing members of the management team, HR professionals must be familiar with the available labor pool in countries where they produce, transmit, or sell products and services. Six demographic categories impact business success: workforce growth patterns, aging, gender, family structure, race/ethnicity, and education.

Workforce Growth Patterns

Workforce growth rates in traditional economies are declining, due to the double impact of reduced birth rates and increased aging. This workforce decline, which is expected to continue into the 2020s, will have substantial influence on the demand for goods and services as well as on the ability of companies to supply those goods and services.

Aging

The workforce is aging. Fewer workers will be available to supply products and services and to support the health and welfare programs that older people will require as they age. In the United States in 1950, there were seven working-age people for each retired person. By 2030, there will be three (Lockwood, 2003). Due to earlier and more dramatic declines in birth rates, most other industrialized nations are experiencing the same trends but at a considerably faster pace. In

Japan, for example, the ratio of older people to workers will almost triple by the year 2050. This means that every elderly person will be supported by only 1.4 working adults (United Nations, 2001).

A number of incentives—economic and otherwise—are encouraging American adults to remain active workforce participants:

- modifying the financial incentives of Social Security to encourage later retirement;
- reducing the financial penalty for those over 65 who earn wages via the Senior Citizens' Freedom to Work Act;
- reducing the trend toward early retirement by shifting from defined-benefit pension plans to defined contribution plans; and
- increasing the levels of physical and emotional health of older adults.

Workforce growth rates in traditional economies are declining, due to the double impact of reduced birth rates and increased aging.

As a result of these government, employer, and individual efforts, the Bureau of Labor Statistics projects an increase in workforce participation among older workers. In the year 2000, 14.8% of individuals from age 65 to 74 were wage earners. That number is expected to increase to 17.3% by 2010 (Fullerton & Toossi, 2001).

Older workers represent a wealth of knowledge and skills and can serve as effective mentors of future talent as they transfer their skills to the next generation. However, they may be uncomfortable with new situations and skills, particularly new technology. HR departments will need to upgrade the general and technical skills of older workers, and to think through alternative job-sharing and job-transfer policies.

Gender

The numbers and roles of men and women in the workforce have been changing for the past 30 years and will continue to change in the foreseeable future. In the United States, labor

force participation rates for men—particularly older men—are going down at a time when women’s rates are rapidly increasing. Between 1950 and 2000, women’s labor force participation increased from 34% to 60%. The most notable increase is for women with children (Bureau of Labor Statistics, 2003). As women take up a greater proportion of the total workforce, their influence extends to all organizational levels. In 1995, women made up 8.7% of Fortune 500 corporate officers. By 2003, that figure had risen to 13.6% (Sharpe, 2000)—low, but rising.

On average, women outscore men in motivating others, fostering communications, producing high-quality work, and listening.

In her *BusinessWeek* article on leadership trends, Rochelle Sharpe (2000) summarized five research studies on gender differences in leadership. On average, women outscore men in motivating others, fostering communications, producing high-quality work, and listening. The dimensions on which women scored the highest are the skills that tend to be in greatest demand in a knowledge economy (i.e., teamwork, partnering, multitasking, and cross-unit cooperation).

If it is true that women, on average, excel in key leadership skills, then why are there relatively few women in the top positions? There are at least four possible explanations:

- *Implicit gender schemas.* Male-dominated boards, which tend to project the idea that leaders must be similar to themselves, may tend likewise to expect that women are unable to handle the intellectual and emotional demands of the top jobs (Valian, 1998).
- *Work-family requirements.* Women may be more evenly balanced in their approaches to work and family life. The top jobs in most companies place extraordinary demands on the time and psychological reserves of their incumbents. This is evidenced by the fact that a disproportionate 49% of female executives between the ages of 41 and 55 have no children. And in business positions, women tend to work an average of 5.7 fewer

hours than men (Bureau of Labor Statistics, 2003). (It could be argued that women require 5.7 fewer hours per week to complete their work).

- *Off the proven track.* Women are disproportionately represented in staff positions such as HR, finance, and marketing. These positions do not provide the general management experiences that are necessary for senior-line positions.
- *Role-plays.* Women are less likely to practice stereotypical male strategies—such as assertiveness, competitiveness, and image management—that promote advancement. Linda Babcock and Sara Laschever (2003) of Carnegie Mellon University found that male graduates with a master’s degree earn 7.6% more than their female counterparts. A major reason for the disparity is that only 7% of the women negotiated for pay that was greater than the initial offer, whereas 57% of the men did so.

Family Structure

The marital makeup of U.S. households is changing. Unmarried or single households now comprise 49.3% of U.S. households and are on the verge of defining the new majority (Simmons & O’Connell, 2003). North Americans are delaying marriage longer, cohabitating in greater numbers, forming same-sex partnerships, living far longer, and remarrying less often after divorce.

The “traditional family structure” is not only under social pressure; it is also under economic pressure (Warren & Tyagi, 2003). In 2003, nearly half of American households were close to bankruptcy. A number of factors may explain this phenomenon:

- *Job loss.* With the twists and turns in the economy, the obsolescence of job skills, attrition of entire job categories, and the radical trajectory of business competitiveness, the risk of job loss has risen 150% in the past 30 years.
- *Rising credit-card and mortgage debt.* Inflation-adjusted credit-card debt in the United States has risen from \$10 billion

in 1968 to \$600 billion in 2000. Middle-class families saw a 75% increase, while low-income families experienced a whopping 184% increase. And just as unsolicited, preapproved credit-card applications make it easier to incur credit-card debt, mortgage lenders have made it easier for people to become obligated to mortgage payments that are beyond their means.

- *Medical expenses.* According to Himmelstein, Thorne, and Woolhandler (2005), medical costs account for approximately half of all bankruptcies among the middle class. Nearly 76% of those reporting medical bankruptcy had health insurance at the onset of their illness or injury, but lost it when they were no longer able to work.
- *Loss of the “additional adult” resource.* As wives and mothers enter the workforce in increasing numbers—whether as single parents or as half of a dual-income household—many more families are losing their financial safety net. In the last half of the twentieth century, middle- and upper-income families adjusted their expenditures to fit the model of a male breadwinner and a stay-at-home mom. If a crisis occurred (e.g., illness, job loss, eldercare, or difficulties with the children), women could allocate their time and resources to bail the family out. But when every adult in the family is already working outside the home, families can no longer rely on the safety net of an additional adult resource (Warren & Tyagi, 2003).

Race/Ethnicity

When the middle of the twenty-first century approaches, the white population in the United States will fall to 63.2% of the whole. As they triple their population growth rates during that same time period, Asia-Pacific Islanders and Hispanics are expected to make up 5.7% of the U.S. population and Hispanics 17%. The proportions of blacks and Native Americans, on the other hand, will remain fairly steady, at 13% and 0.8% of the total, respectively (Karoly & Panis, 2004).

The social and economic influence of Hispanics will be especially noticeable in the coming decades (Grow, 2004). The relatively high Hispanic birth and immigration rates are projected to increase. Given that Hispanics, as a whole, are relatively younger than other immigrants, they also tend to be overrepresented in the labor force compared to non-Hispanics. Since 1995, the Hispanic disposable income in the United States has almost doubled at a rate that is twice that of the rest of the U.S. population.

Education

For much of the twentieth century, one of the dominant sources of national comparative advantage for the United States has been its educational system that is directly linked to workforce innovation and productivity. In the last few years, however, the advantage that the United States has had in education over other countries is shrinking. When education lags, so will innovation and productivity. When these lag, cost becomes the determining factor and jobs move to the lowest-cost provider, as is the case in the IT sector between the United States and India. The India educational system is turning out tens of thousands of very bright and well-trained IT specialists. The Indian specialists have capabilities that approximate those of their U.S. counterparts and they are currently willing to work for a fraction of the cost.

In spite of robust U.S. educational completion rates and a high proportion of GDP expenditures on education, the United States falls in the middle of G-8 countries on standardized achievements tests in reading, mathematics, and science. One likely explanation for this problem is the fact that the United States has the greatest average spread on achievement tests of G-8 countries. The 95th percentile of U.S. students represents the greatest of the G-8 countries, but the bottom 5th percentile of U.S. students represents the lowest. One of the rea-

The social and economic influence of Hispanics will be especially noticeable in the coming decades.

sons for lower achievement test scores may be the greater heterogeneity of our population. Even as its educational system adjusts to assimilate many low-skilled immigrants, the United States may continue to build much of its productivity and creativity from immigrants from every part of the globe. The upcoming baby-boomer bulge will soon be dependent on the skills of so-called "minority" workers to maintain a healthy economy for us all.

Concurrently, the United States is generally acknowledged to have the highest-quality colleges and universities in the world (Hanushek, 2002) that serve as a magnet for some of the best intellectual talent in the world. Seventy percent of foreign-born individuals who receive their PhDs in U.S. universities remain in the United States for long-term employment (Bhagwati, 2003). The less positive news from universities is that between 1995 and 2002, the number of U.S.-born graduate students in science and engineering dropped from 13,400 to 9,900.

These demographic trends have important implications for the flow of talent in an organization. They will affect who is hired, how to train, how to remove, and how to retain talent. HR professionals should not only be conversant in these data, but also should be able to see how these data apply to their specific organization.

Conclusion

This article is built on the premise that knowledge of external business realities will

enable HR professionals to more fully function as contributors to the business. It should be a given that HR professionals are familiar with the concepts and practice of the HR field. It is becoming a given that HR professionals are knowledgeable of the needs and functioning of internal and external stakeholders. However, to be informed contributors, HR professionals now must be fully versant about external business realities that directly or indirectly influence internal and external stakeholders. We suggest that the most central categories of external business knowledge include advancements in technology, causes and effects of economic and regulatory turbulence, dynamics of business globalization, and changes in population demographics. With knowledge about these fundamental business drivers and their supporting data, HR professionals will be more able to make credible and accurate strategic contributions to business discussions and to proactively build HR practices that will create organizational capabilities. In so doing, HR professionals will be able to leverage their knowledge of external business realities to create substantive competitive advantage for their businesses. This article describes these realities as they exist today. The challenge is to remain updated in an increasingly turbulent business environment.

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WAYNE BROCKBANK is a clinical professor of business at the Stephen M. Ross School of Business at the University of Michigan, where he serves as the director of the Center for Strategic HR Leadership and of the number one-rated senior HR executive programs. His research and consulting focus on linkages between HR and business strategy and emerging high-value-added agendas of the HR profession. He has published widely in *Human Resource Management*, *Human Resource Planning*, and *Personnel Administrator* and is the coauthor with Dave Ulrich of *The HR Value Proposition* (Harvard, 2005). He is a principal in RBL Consulting (www.rbl.net) and consults in his areas of expertise with major clients on every continent. He currently serves on the SHRM Board of Directors.

DAVE ULRICH is a professor of business at the Stephen M. Ross School of Business at the University of Michigan. He studies how organizations build capabilities of speed, learning, collaboration, accountability, talent, and leadership through leveraging human resources. He is the cofounder (along with Norm Smallwood) of Results-Based Leadership (RBL), a collective of well-known and broadly experienced management educators and consultants. He has published more than 100 articles and book chapters and 12 books. He was the editor of *Human Resource Management* (1990–1999), has served on the editorial board of four other journals, is on the Board of Directors for Herman Miller, is a fellow in the National Academy of Human Resources; and is a cofounder of the Michigan Human Resource Partnership.

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