

C

E



Center for
Effective
Organizations

**The Future of HR
and Effective Organizations**

**CEO Publication
G 11-08 (596)**

John Boudreau

*Professor and Research Director
Center for Effective Organizations
University of Southern California*

Ian Ziskin

*Executive in Residence
Center for Effective Organizations
University of Southern California*

June 2011

**Submitted for publication in a special
issue of *Organizational Dynamics***

The Future of HR and Effective Organizations¹

John Boudreau

Professor and Research Director
Center for Effective Organizations
Marshall School of Business
University of Southern California
3415 S. Figueroa Street, #200
Los Angeles, CA 90089
1-213-740-9814
john.boudreau@usc.edu

Ian Ziskin

President of EXec EXcel Group LLC
Executive in Residence and advisor, Center for Effective Organizations
Marshall School of Business
University of Southern California
3415 S. Figueroa Street, #200
Los Angeles, CA 90089
1-213-740-9814
iziskin@exexgroup.com

¹ Thanks to Arienne McCracken for her invaluable editorial assistance.

We believe HR's reason for being is to make people and organizations more effective. We also believe that this will not change in the future. However, it's clear that HR needs to find ways to do its work faster, with less bureaucracy and more business relevance. HR's aspirations do not yet fully align with its ability to deliver. At the same time, we must also acknowledge that the bar keeps getting raised – HR is indeed improving and developing its capabilities, but the expectations about what HR can and should deliver are also getting bigger, in possibly unrealistic ways; in addition, the consequences of not delivering are also getting tougher and less forgiving.

This article describes the results of an ongoing initiative by the Center for Effective Organizations at the University of Southern California to understand the future of HR, and in particular its relationships within effective organizations in dynamic environments. We began with the premise that over the next 5-10 years the future of HR work (specifically) and effective organizations (more broadly) will in many ways be quite different. We brought together dozens of HR leaders over the past few months to get their counsel on the issues and trends they note in their everyday work, and we took a careful look at current writing about the future of HR, as well as several current initiatives that seek to define or influence that future.

Our investigations are ongoing, but this article will explore six major emerging themes from our work. The six trends that constitute the future of HR include shifts from:

1. Hero Leadership to Collective Leadership
2. Intellectual Property to Agile Co-Creativity
3. Employment Value Proposition to Personal Value Proposition
4. Sameness to Segmentation
5. Fatigue to Sustainability

6. Persuasion to Education

The Larger Perspective: Multiple Levels and Multiple Constituents

These trends emerge from a larger perspective that aims to capture the meta-trends that will affect the profession. While the future of HR will certainly be defined in part in terms of questions that exist within the domain of today's HR discipline, we increasingly find that the most significant and important issues will require that HR professionals look beyond the traditional boundaries of their function. HR's future role and its effectiveness will typically be defined through multiple levels and in terms of issues and standards that will span multiple constituents. Exhibit 1 portrays this idea graphically.

INSERT EXHIBIT 1 ABOUT HERE

The centermost circle, "Future HR," is meant to capture those issues that are primarily focused at the level of the HR function itself. Thus, important questions about the design of HR functions, HR's professional roles and competencies, how HR uses infrastructure like information technology and process delivery systems, and the specific programs and practices that HR enacts. Much attention to the future of HR has rightfully focused here. Yet our view is that as important as such issues are, they must be embedded within a broader perspective to fully understand the challenges and opportunities facing HR's future.

The middle circle, "Effective Organizations," is meant to capture the reality that HR must exist and optimize its role within a surrounding organizational context. HR will influence and be influenced by organizational elements such as structure and design, culture, and leadership, as well as such organization-level issues as sustainability, diversity and social responsibility. This reality has not been lost on those who study the profession and its future. Indeed, the HR profession is often centrally involved and even a primary driver of organizational success in areas such as diversity and leadership. That said, we and our colleagues at the Center for Effective Organizations find that HR's involvement and leadership in these organization-level issues varies considerably. The evolution of HR's role in these areas will significantly define the evolution of the professional elements in the centermost circle. For example, it is still common, though our experience suggests less so than in the past, for the functions of organization effectiveness, design and development (OD) to be separate from the HR function. Indeed, it is not unusual to find professionals in the OD area to be quite insistent that they are not a part of HR, noting that they address more "strategic" issues of organization design and effectiveness, while HR addresses more tactical and administrative issues that support the strategy. It has been noted that such a stark separation can create serious and important limitations for organizations and for both the OD and the HR professions, and that OD competencies are vital for HR, and vice versa. We see a similar pattern in the area of leadership development, again with the trend appearing to be toward incorporating leadership into the HR profession, with a strong integration to the portfolio of HR practices for leaders but also for the broader workforce (more on this later when we discuss collective leadership). In arenas such as social responsibility and sustainability, the evolution remains in question. We see many organizations where there are significant initiatives in these areas, but little presence of HR in formulating the agendas or implementing the key initiatives. Rather, the role of the HR profession seems to be more reactive, awaiting resolution of the thorny questions and then being ready to implement the requested HR programs and practices. That said, there is an upwelling of books and

articles suggesting a more central role for HR in defining such issues and their strategic role in the organization.

Finally, the outer circle of the Exhibit reflects the "Dynamic Environment" as a defining factor of effective organizations, and thus a significant determinant of HR's future. These are the trends and influences that will span organizations and affect entire industries, regions and economies. Like the issue in the center circle, these broader environmental trends are sometimes a central concern of the HR profession, but more often appear only in the broadest strategy statements. The role of the HR profession in directly defining and responding to these issues remains to be defined, yet the HR profession's capability to play a significant role where appropriate will be key. Perhaps more important will be the profession's ability to pick its spots to engage on such issues. It is not yet clear that the HR profession must play a leadership role in such issues as climate change and geopolitics, but what is increasingly clear is that HR leaders must understand such trends well enough to help their organizations craft strategic responses. HR's role may well emerge as one of a supporting player, with disciplines such as politics and economics being fundamental and organizational functions such as strategy and government relations taking the lead.

Yet we also see emerging examples where the effects of these trends manifest themselves primarily through the employment relationship, and thus thrust HR into a central role. Global labor markets and collective action are often the organization's first tangible globalization challenge. Employment unrest or HR's role in crisis-management and evacuating employees and their families can often be the first organizational challenges that requires significant attention to geopolitics. Thorny issues of employee behavior in technologically enabled social networks and forums may often be the organization's first tangible challenges that require a considered position on emerging technology.

In sum, Exhibit 1 has proven useful to us and to our consortium of executives in capturing the idea that the future of HR will likely be defined in large part by how well the profession spans

boundaries that have largely remained unaddressed and avoids focusing exclusively on the profession itself (the middle circle) out of context. Again, this should not be read as diminishing the importance and value of the work that will be done to define the future of the middle circle, but our perspective, and the issues addressed here, have largely been shaped by the perspective that some of the most important defining elements of HR's future will reflect how the profession navigates the multi-level challenges of the future.

Implications of the Multi-Level Perspective on the Future of HR

Several broad observations emerge as we use the boundary-spanning perspective of Exhibit 1 to engage HR leaders and constituents to think more broadly about the profession and its future role. The three observations are:

1. HR Success Will Incorporate Other Disciplines
2. HR Success Will Rely on Boundary-Spanning
3. HR Success Will Require Accepting Diverse Definitions of the HR Role

HR Success Will Incorporate Other Disciplines

Challenges such as diversity, sustainability and socio-economic disparities require approaches that draw on disciplines well beyond the traditions of the HR profession. Traditional HR disciplines such as industrial and organizational psychology and labor economics are valuable, but increasingly we see HR organizations reaching beyond these traditional areas in an effort to address thorny but important challenges. Google employs analysts in its People Analytics (HR) organization with disciplinary backgrounds including operations, politics, and marketing. Human capital planning and strategy is increasingly carried out with the assistance of those with deep training in competitive strategy and scenario planning, whether they exist within the HR function or in a separate strategy group. We have

long seen examples of HR process excellence being achieved with the involvement of operations management experts, or even by placing responsibility for HR processes within the operations management group itself. When IBM's HR organization wished to design its talent management system using the logical principles of a supply chain, it engaged its top experts in operations management to assist and help lead the project. We are increasingly seeing the employee value proposition and employer brand being defined using tools from the disciplines of consumer behavior and marketing, and in some cases those efforts are contained within marketing organizations with deep expertise in branding and consumer research. At Starbucks, Melissa Graves, an I/O psychologist, is the Director of Partner Insights, which brings the best tools possible to questions about partners, stores, customers and financials. Prasad Setty of Google and Juha Äkräs of Nokia are two additional examples of non-HR professionals who came into the function to become effective HR leaders.

An understandable reaction from HR professionals might be that the HR profession is losing "turf" to other disciplines and is in danger of being hollowed out unless it reclaims areas such as strategy, branding and process excellence. Yet, perhaps the most successful future HR organizations will be those that accept the permeability of functional and disciplinary boundaries as holding the promise of a richer discipline, even if the HR functional boundaries are less clear.

The answer is unlikely to be the same for all organizations. Sometimes this trend will mean expanding the role of HR, such as when HR's effective handling of employment issues relating to communications and corporate social responsibility leads to expanded roles that incorporate responsibility for all these areas. In other organizations it may mean that things like strategy, process excellence and employment branding are primarily driven out of functions such as corporate strategy, operations or marketing. The question in the future may be less about "what competencies must we in HR develop in order to address these multi-disciplinary challenges within our own function," and more

about "what competencies exist among the best and brightest in any discipline, that HR can skillfully draw upon to best address these challenges?"

HR Success Will Rely on Boundary Spanning

Closely related to the first observation is the idea that HR will increasingly need to span boundaries of all types to be effective. Certainly, boundaries between disciplines and functions will need to be more permeable, as we noted above. However, HR will also likely need to span the boundary of the organization itself. Work by Susan Albers Mohrman and Chris Worley (see, for example, chapters in the forthcoming *Organizing for Sustainability*) suggests that solving issues of sustainability requires considering organization designs that demand inter-organizational cooperation, resource-sharing and decisions. One can foresee that such solutions will be necessary for virtually all of the issues in Exhibit 1. The "collective" is increasingly defined without the necessity of an organization boundary. Disciplines such as Marketing and Research & Development routinely draw ideas from the "crowd" around the organization, and consider engaging that "crowd" to be as vital to their mission as engaging the employees within their organizations. Focus groups are widely employed to elicit opinions and feedback from customers (and potential customers) about a whole host of issues, including products, services, new product development, and advertising. The Mattel Imagination Test Toy Center brings in children (5 years and older) to play with, test and comment on new toys not yet on the market. Emerging markets increasingly require engaging constituents such as NGO's, governments, local collectives and others that may exist both within and outside the organization.

Moreover, the boundaries between the HR function, the organization and the environment depicted in Exhibit 1, will be more permeable. At Gap, Inc., HR professionals have the opportunity to take assignments that have them helping business owners in emerging economies learn the basics of such things as motivation, performance assessment, training and communication. These assignments

span the boundary between the HR function, the organization and the economic environment within which they exist. Traditionally, the future of HR might have been defined by how well HR professionals could create the capabilities of those who would eventually work with these business owners, or those who would negotiate or arrange for the opportunity. This example goes further, putting HR leaders in a direct position to carry out the boundary-spanning activity. The result: Better-run businesses in emerging countries that happen to be direct suppliers of the essential components of Gap products. Lower costs, higher quality and better employment relationships are all outcomes of this kind of boundary spanning, but it turns out to be the HR skills that were most needed by these suppliers.

HR Success Will Require Diverse Definitions of the HR Role

Traditional debates about the role of HR have focused largely on its capability to influence and affect organizational outcomes and its role in influencing constituents such as line leaders and employees. It is still vitally important to extend such discussions about roles like strategic partner, change catalyst, trusted advisor, employee advocate and process architect. Yet, most of the discussion about such roles has been largely within the center circle of Exhibit 1. What we envision is a broader discussion about the role of HR, which will more directly account for the white spaces that are created by the multi-level issues and approaches of the future. When is the role of HR to support the initiatives of others with strong traditional human capital programs and processes? When is the role of HR to be the "face" of the organization on significant issues such as sustainability and environmental responsibility? When is the role of HR to be the disciplinary expert on issues such as emerging social networks and harnessing the power of the crowd?

For example, when Bill Conaty wanted an executive to head up his new function of corporate responsibility in 2004, he reached out to the head of GE's Crotonville learning center, Bob Corcoran. Bob soon found himself traveling the globe on projects such as bringing advanced health care to Ghana

as part of GE's Developing Health Globally initiative – GE had no business interests, offices, or facilities in Ghana at the time. In his new role, would we say that Bob Corcoran is still in HR? Is Corporate Social Responsibility still a separate function from HR? In the future, these questions will probably be less important than the questions of how HR leaders can best leverage their capabilities to make the biggest impact, regardless of the boundaries they must cross.

In sum, seeing the future of HR through a multi-level lens redefines some of the most basic premises about the meaning of HR, the role of HR professionals, and the meaning of the contribution of HR leaders. In the next sections, we take up several of the most prominent themes that have emerged from our early work to identify the issues that will likely define the future of HR, and that vividly illustrate the need to think "beyond the center circle."

With this background in place, let's return to the six themes that have emerged from our work with HR leaders, using Exhibit 1 as the jumping-off point for our discussions. Again, the six themes are:

1. Hero Leadership to Collective Leadership
2. Intellectual Property to Agile Co-Creativity
3. Employment Value Proposition to Personal Value Proposition
4. Sameness to Segmentation
5. Fatigue to Sustainability
6. Persuasion to Education

Hero Leadership to Collective Leadership

Whether it's "rock star" CEOs or actual rock stars, it is tempting to follow high-profile, larger-than-life personalities. Yet, in fast-changing environments, every leader has a shelf life, and relying too heavily on a single hero leader can make the organization vulnerable. When these rock-star leaders crash and burn, they often making a spectacular and disastrous mess. At the time of this writing, for

example, the world was scratching its collective head over the resignation of the head of the International Monetary Fund, after alleged sexual escapades with a hotel housekeeper in New York. The solution may well rely on nurturing and exploiting broad-based and diverse leadership from many sources, not just the hero CEO or even the leadership team. The future of HR will evolve from hero leadership to collective leadership.

Organizations of the future are going to rely much more heavily on the collective leadership, commitment, and wisdom of people at all organizational levels, who can collaborate across silos and boundaries. These kinds of organizations will view everyone as a leader, and people will have re-invigorated accountability and authority to act on behalf of customers, employees, and other key constituents, rather than waiting for "divine guidance" from above. This movement will place an even stronger emphasis on the relationship between line leaders and the people who work directly for them; the relationship with one's immediate supervisor increasingly appears to be a vital determinant of how employees feel about an organization. In some ways this harkens back to the idea that "the best union organizer is a bad boss," or that "people don't leave organizations, they leave bosses." Our point is that in organizations where leadership is more pervasive, the effect of this relationship will be even more pronounced, and more pivotal to organization success.

Over-reliance on high visibility "rock star" leaders at the top of the pyramid is a huge risk to organizational viability, continuity, and sustainability going forward. The recent examples of what is going on in the Middle East and North Africa as one dictator after another loses his grip on power are powerful and instructive. In the corporate world, Apple stock prices fluctuate whenever announcements are made about charismatic leader Steve Jobs' health status. Even an iconic leader as talented as Jobs cannot substitute for broad-based leadership capability. And more and more often, we see CEOs and other leaders acceding to demands made by shareholder activists or even being tossed out. UBS AG cut its 2010 bonuses by 10% after outcries from shareholders. Battles between CEOs and

shareholder activists are quite well-known even to the general public: see the Roy Disney/Michael Eisner conflict and the Walter Hewitt/Carly Fiorina fights for two obvious illustrations. Carl Icahn has made a name for himself as an activist shareholder, battling with Yahoo, Time Warner, and Blockbuster. Shareholder activism is starting to become more and more the norm, and employee activism may not be far behind. In an era where shareholders or other constituents may demand the removal of top leaders, or where disputes among leaders may cause a top team to implode, HR will increasingly be called upon for an approach to leadership that looks beyond supporting the top team, or even preparing successors for traditionally defined executive leadership positions. Something more collective and pervasive is called for, where leadership and its responsibilities and rewards are vested in a broader and more diverse group. This trend begs examination of a key question – is leadership an individual capability or an organizational capability? The authors believe it is both.

Collective or shared leadership is not new, yet we believe it is especially suited for the contemporary world. Current society is marked by discontinuous, ever-accelerating change and ever-increasing knowledge and access to knowledge. Spreading leadership across and into the organization can be both a logical and adaptive thing to do. O'Toole, Galbraith & Lawler noted that shared leadership is especially suitable "when the challenges a corporation faces are so complex that they require a set of skills too broad to be possessed by any one individual." This is not to say it is easy, but it can be and has been done successfully, from the shared leadership of Bill Hewlett and David Packard at HP from the 50's to the 80's, to Intel, which has been run with leadership teams from the very beginning of the company. Today, Cisco CEO John Chambers is extending the idea of shared leadership and collaboration through technologies that enable virtual telepresence and through governance structures that incorporate boards and councils to create leadership and innovation that spans silos.

The last few decades have seen widespread downsizings and restructuring, which often led to far fewer levels of management, the increasing development of team-based work, and more worker

empowerment. With the rise of teams, especially of knowledge workers, we also saw an increasingly flattened hierarchical structure. In companies with this type of structure, it is no surprise that collective leadership is coming into being. The W. L. Gore Company's approach is one example of an organization that eschews hierarchies and encourages high involvement and team leadership. Gore employees *all* hold the title of "associate," and everyone is encouraged and expected to lead and be creative.

Leadership at the Southern California Permanente Medical Group (SCPMG), the organization comprising the Kaiser Permanente health system's physician group in Southern California, is an example of ongoing successful collective leadership, with the executive medical director, Dr. Jeffrey Weisz, and his small executive team. Leadership at SCPMG does not stop with this group. SCPMG is a partnership structure, so the partners co-own and self-govern the group. Autocratically pushing decisions down into this organization is not possible; moreover, because of the nature of the work done, new knowledge and innovation often bubble up from anywhere in the organization. Thus one of the major endeavors of the leadership team is working to identify initiatives and new ways of doing work that may be surfacing in one part of the organization and then working to spread the new knowledge more widely across the organization.

Consider the implications of collective leadership through the concentric circles in Exhibit 1. The future HR profession in the center must clearly be adept at engaging beyond the traditional role of creating leadership and succession systems, competency frameworks or internal talent management systems, notwithstanding how important these will be. To effectively deal with the challenges that collective leadership will bring, future HR leaders must be adept at creating organization cultures and structures that nurture, uncover and reward leadership wherever it exists, as well as being adept at both understanding and shaping the dynamic environment (in areas such as technology, society, governments and collective institutions) that must support and understand that leadership doesn't just happen at the top. Thus, HR leaders may need backgrounds in politics, social technology, and

anthropology. They may need experiences in grass-roots organizing and promotion of emergent political and community leaders, and the ability to influence constituents to recognize leadership even when it is not associated with traditional titles.

Intellectual Property to Agile Co-Creativity

A second shift that is creating the future of HR relates to creativity and innovation. Traditionally, innovation is seen as occurring within the organization, in designated roles such as product developer or designer, through specific, sequential process "gates," and producing tangible results that can be identified and protected through patents or other intellectual property rights. This idea is giving way to a reality of agile co-creativity. Organizations are realizing that creativity can come from anyone and anywhere – traditional organization boxes or job roles are no longer the sole repository of creativity. Creativity is becoming less of an ownership-based and more of a community-based endeavor. This means that creativity and innovation occur both inside and outside of the organization. Creativity may arise from many different roles and levels, that it happens in non-sequential and often unpredictable processes, and that it produces transient results that are more like experiments than finished products to be claimed and owned.

Clearly, this trend relies in part on the emergence of the collective, just as we discussed earlier regarding collective leadership. In this case, it is the collective ideas and creativity of those with a passion to contribute, both inside and outside the organization. How many HR practitioners have been involved over the course of their careers in some kind of employee involvement initiative such as Total Quality Management, Six Sigma, Lean, Workout, Continuous Process Improvement and the like? All of these initiatives and more have had their adherents in HR functions over the years. However, today HR doesn't tend to talk so much about employee involvement; "employee engagement" is the order of the day – even though it's almost impossible to have involvement without engagement or vice versa.

People often feel a higher sense of engagement based on affiliation with ideas and ideals than based on commitment to specific companies. This has been observed for a long time among scientists and engineers, in places like Silicon Valley. When you combine the desire for employees to contribute to something bigger than themselves, and to have a hand in inventing and re-inventing their environment, the potential to harness the collective creativity of those within and outside the organization becomes clear. Social media-based co-creativity is the newest form of involving and engaging employees in large-scale organization change and creating ownership of outcomes.

For example, the Decision Accelerator (DA) is a powerful example of a structure to engage people both inside and outside of an organization as they struggle with complex problems and innovate. It is a large-scale intervention that includes multiple stakeholders working together to coordinate and create solutions to a specified set of issues. DA workshops generally take place over 1-3 days and include up to 100 or more people. People at the DA all participate in coming up with creative solutions to the problems being discussed. They all co-design, assess and decide on solutions to incorporate into the company. It is a powerful process. Companies like Alegen Health have used the DA process over a hundred times.

A software design approach increasingly accepted as standard in the industry is a very good example of creativity, working flat, and eschewing silos. This approach is called "extreme" or "agile" software development. By working continuously and face to face with the customer, the team of software developers creates, works, programs and delivers new working software in iterative steps to the customer. The team directly interacts with a customer on a weekly or even a daily basis. In this way, the team will not have to deal with the formerly inevitable "requirements churn" issue (meaning that by the time a perfectly finished piece of software was realized in the old system, customers will have inevitably realized they actually wanted something either slightly or a lot different than they originally specified – see the Agile Alliance's website at <http://www.agilealliance.org/>). By making

changes (minor or major) to software earlier in the development cycle, costs are reduced and the project can better keep to its timeline. These principles are also reflected in an engineering approach called "concurrent engineering" (see the journal *Concurrent Engineering* <http://cer.sagepub.com/> for example). It is also an illustration of not only team co-creation but of co-creation with external customers, who by interfacing with the team regularly, provide real, continuing input into the design of the software. Programmers realized that they could no longer produce something in secret and set it loose in the world and expect it to be greeted with wonder and acclaim. Organizations can involve customers in the concurrent engineering process as well. They changed the way their work got done to make it more efficient and effective.

Now, the advent of social media is completely obliterating the way people organize for change, how they get and distribute information, and how they innovate. One of the most familiar examples of creativity online is Wikipedia, the free online encyclopedia that anyone can edit or add to. Wikis are websites that are used for collaboration, and Wikipedia was developed on that kind of platform. Wikipedia is a controversial site in that its accuracy and objectivity are still debated. The fact that anyone, not just experts, can contribute, as compared to more traditionally edited encyclopedias such as the *Encyclopedia Britannica*, makes many uncomfortable. However, this site is arguably the first stop for all internet-using information seekers, even if only to get a set of "respectable" references to further one's search for information. It contains over 3,600,000 entries in English alone. Future HR leaders should take notice. No matter how much you may wish to preserve editorial authority over such things as mission statements, competency frameworks, and employee communication, the collective will exert more and more power to define and organize these arenas.

A technique that is becoming popular on the internet and elsewhere is crowdsourcing, where a person or a company asks the collective intelligence of the internet for input or solutions to a whole range of issues (from how many appetizers to serve per person at a party to how to write a business

plan). A popular blogger may ask readers for help with a particular problem, or an online community message board may contain a question from a member. Sites such as Yahoo Answers host questions that can be answered by anyone around the world (although concerns about the accuracy of these answers are similar to or more marked than Wikipedia's entries). Companies such as Imaginatik and Interact Intranet now offer software and services for organizations to harness their own employees' crowdsourced ideas. So, though crowdsourcing is not a perfected process yet, lots of evidence suggests that these early-stage issues are being addressed as inventive new organizations enter the field. It seems likely that collective problem solving will increase in its frequency and effectiveness.

Social networking is also radically changing the relevance of the hierarchy in the workplace – why wait for senior management or your immediate boss to tell you what's going on when you can hear it more directly and immediately from your friends on the internet? Just look at the recent examples of transformative change that have taken place in the Middle East and North Africa, where it's evident that entire countries are being turned upside down by people in their mid-twenties using Facebook and Twitter.

If people are willing to risk their lives to bring about social and political change via social networking, why wouldn't they be willing to irritate a few CEOs and HR leaders by transforming their organizations in the same manner, backed by social networking tools that allow them to communicate, organize, and act much faster and more flexibly than most companies can?

Even before the recent uprisings, there was the story of American grad student James Buck, who was arrested in Egypt in 2008. He was able to tweet one word, "Arrested," on his cell phone while he was being taken to jail. His twitter followers then called the press, the U.S. embassy, and his college. Through the intervention of his college, he was soon released. On a more mundane level, Twitter users often are alerted to any severe weather developments and breaking news faster via Twitter friends than any other source.

Once again, it is instructive to consider this trend through the framework of the concentric circles in Exhibit 1. Future HR leaders will need to think and act well beyond the traditional boundaries of the HR function, which might typically be prepared to migrate traditional suggestion programs to new technology platforms, create reward systems that recognize creativity, or train leaders in ways to foster and nurture more creativity in their teams. These are all important, but the most significant challenges may lie well beyond the traditional HR boundary. Future HR leaders will need to address the organizational challenges of defining and harnessing innovative cultures, knowing when to encourage innovation and when allowing too much innovation will create chaos, and understanding the power of opinion leaders in social networks to make or break the organization's creative progress. At the environmental level, future HR leaders will face challenges of defining precisely where intellectual property may lie, whether with those inside the organization or with the collective contributors outside the organization. They may well be called upon to provide expert advice not only on how to attract, retain and motivate creative employees, but how to carry out the equivalent tasks for key outsiders such as customers, bloggers and others. These key players and their gathering places outside the organization (massively multi-player online games, social networks, clubs, Twitter followers, etc.) will likely become equally or more significant targets for the traditional skills of the HR leader.

Employment Value Proposition to Personal Value Proposition

The third trend that we believe will define HR's future is a shift from an employment value proposition to a personal value proposition. This trend is about asking ourselves the question, "What would change if we really treated employees like customers and used marketing principles to do so?" The question immediately calls to mind issues of value analysis, tradeoffs among value drivers, service and product quality, and customer and employee segmentation. HR has traditionally devoted a great deal of energy and focus to the employment value proposition, considering employment by the

organization as a product that can have a brand, and focusing on employees and potential employees as the evaluators and targets of that value proposition. The future challenge will be to extend this idea in at least two ways.

The first change is that the employment value proposition will extend beyond employment. For example, it is already clear that customers, legislators, investors and activist groups sometimes regard the employment brand as an extension of the organization. Today, we see this most prominently when an organization attracts the ire of customers, communities, governments and others through what are perceived to be unfair or harsh employment practices. "Boycott International" (<http://www.1worldcommunication.org/Walmart.htm>) and "Walmart Watch" (<http://walmartwatch.org>) are two websites dedicated to chronicling the ongoing efforts to boycott Wal-Mart because of alleged employment practices. How employees and prospective employees react to the value proposition, while important, may often be secondary to considering how the employment value proposition affects the perceptions of key constituents who may never become employees at all. This is precisely how some chief HR officers have found themselves called upon by their leadership teams to take on a relatively new role of Chief Reputation Officer. In industries such as fashion, retail and professional services, where the labor practices of the organization are often the most visible manifestation of its values and principles, there is increasingly a fine line between the boundary of the employment value proposition and the brand of the organization and its products.

The second change is that traditionally, rather monolithic employment value propositions have been based on broad ideas such as being family-friendly, innovative, fun or technologically advanced. Future HR leaders must embrace the reality of demands and capability for mass-customization based on what drives value for specific, individual employees as people – both on a work and a personal level. Is it schedule or location flexibility? Is it challenging work, or a better boss? Is it coworkers we actually like being around? Perhaps it is mass-customizable compensation and benefits to allow for more choices.

Try to imagine the impact of companies offering customizable workplace options to current and prospective employees as a means of marketing to them why they should work there, just as an automotive or PC manufacturer might market to us by offering a wide variety of product and service features that they customize to our unique personal needs and interests.

Deloitte's Mass Career Customization (MCC) model, implemented in-house to 80% of its U.S. employees and now being offered to the organizations it consults with, is a program that seeks to individualize "career/life fit" for all employees. More than just flexible work arrangements, each employee can decide what his/her career will look like – and it is a malleable system, acknowledging that priorities change over time for a variety of reasons. The MCC model speaks of "dialing up" and "dialing down" changes to mesh with a given employee's needs. The MCC gives individuals choices in four areas: pace, workload, location and role. What is the organization and HR's role in this? The challenge for future HR leaders may be not only to recognize the opportunity to mass-customize employment, but also to become experts on making the tradeoffs necessary to strike the right balance: Achieving enough customization to attract, retain and motivate the vital and pivotal talent while avoiding standardizing so much that opportunities are missed, but at the same time avoiding over-customizing so much that it creates chaotic or overly expensive reward systems. Again, when we see this in terms of Exhibit 1, it is apparent that this evolution of the employment value proposition to a personal value proposition means thinking "outside the box" of the traditional HR perspective in the middle circle. The tools of marketing and consumer behavior offer powerful ways to redefine the value proposition in terms of organizational attributes such as sustainability and environmental responsibility, and to consider "segments" of employees and potential employees based not only on generational differences that are so popular today, but on the myriad ways that individuals may cluster according to their needs and motivations, including culture, lifestyle and geopolitical context.

The future challenge may well evolve from creating an appropriate employment brand to the dilemma of identifying the most impactful populations of employees and potential employees and understanding which of their characteristics is most vital for optimizing value propositions, messaging and brand imagery. Undoubtedly, HR leaders will either need to draw upon or become more expert in the tools of marketing and consumer behavior to solve these important dilemmas. A fundamental task will be to break free of HR's traditional tendency to prefer standardization and sameness on the assumption that equal treatment is fair treatment. That brings us to the next evolution of "sameness to segmentation."

Sameness to Segmentation

In keeping with the theme of marketing principles, the fourth trend we anticipate is trading sameness for segmentation. This potential shift is about answering the following controversial question: Are HR leaders more interested in treating employees the same in the name of preserving supposed fairness and minimizing controversy, or are they more interested in treating employees differently – where it makes business sense to do so – based on their roles, contributions, and value to the company?

Here's the rub: "fairness" does not equal "sameness." Think about gardening. Flower varieties in a garden do not all require the same treatment to thrive – some need a lot of water, some only a little; some require sunlight, some shade; some require rich soil, some no soil at all. It is the gardener's job to understand what makes each flower thrive. It is understandable that HR leaders often want to put all employees in the sun and give them all the same amount of water. On the face of it, treating everyone the same seems like the right thing to do. Indeed, many laws and regulatory requirements are specifically designed around the idea that equal treatment is fair. But, is the most important risk that HR programs treat people unequally, or is it the failure to create conditions where the very best talent can thrive? To be sure, this is a complex dilemma. Naturally, we assume that HR executives don't want to

treat people unfairly; at the same time, we believe that HR no longer has the time or the resources to treat everyone the same. All of the trends we have discussed so far argue in one way or another for a deeper understanding of individual differences, and the courage to address those differences through talent segmentation and appropriate differentiation. In the U.S., and some other regions, legal scrutiny may often come with differential treatment, especially when it seems to produce adverse impact in selection or pay. Future HR leaders will need to be mindful of these dangers, but must also be mindful that segmentation can carry significant benefits for both employees and employers. One future frontier may be in helping legislators and regulators craft laws that appropriately recognize the difference between unfair and unequal treatment.

Increasingly, we will have to face up to the challenge of segmenting our employee populations. Individuals will be considered based on their relative value to the organization as well as according to their relative contributions. If performance distribution curves and forced rankings are difficult, imagine a future where the highest-performing individuals in the highest-impact roles start commanding their own individual deals. In the sports and entertainment industries, these special people are called "the talent." We believe that along with actors, musicians, and athletes, certain biomedical engineers, nano-technologists, and even a few HR leaders will be referred to as "the talent" and will be treated accordingly.

While these select roles and individuals might not have their own dressing rooms or shoe contracts, they may very well have custom-tailored compensation plans, unique benefits and time-off deals, more flexible work arrangements, special funding to work on pet projects, highly personalized development programs, and other unique features not generally available to other employees. To some extent, we already know how this works – our workplaces are already somewhat segmented. Temp workers, hourly employees, and salaried employees very often have different compensation plans and benefits available to them at the same company. Most organizations identify and treat high-

potential employees differently than others. The difference going forward will be that dynamic environments and complex organizations will require far more savvy and nuanced segmentation, which is flexible enough to shift dynamically as things change. We see important similarities between the shifting and nuanced relationship between consumer attributes and product features. The marketing discipline and its underpinning theories and evidence about consumer behavior are likely to provide important future tools to help HR leaders and their organizations manage this challenge by "retooling" traditional HR issues such as total rewards and value propositions in the frameworks of consumer segmentation, product features and market optimization.

Bupharm, an Indian pharmaceutical company, decided to employ talent segmentation both for getting talent into the company and for the current employees. The company was explicitly aware that the quality of the talent it could recruit and retain would directly impact its success – at the time (2009) India's pharmaceutical industry was facing a severe talent shortage. "Lynchpin" talent (those deemed mission-critical and pivotal to success) were offered specific rewards to encourage them to stay, such as challenging assignments and development focuses. The company also segmented its incoming talent. Fifteen months after implementing this new approach, Bupharm saw that it had been able to hire many very highly talented people into the organization. In addition, the attrition rate for the top and valued talent segments in the company had been reduced from 19 percent to 12.89 percent.

Shanda, one of the largest gaming companies in China, employs game designers and engineers who grew up in the environment of massively multi-player online games (MMO's) where one earns points according to one's achievements and prowess. Recognizing this vital employee segment, the CEO decided to redesign the performance management and talent development system at Shanda to resemble an MMO where employees receive points for job performance, special projects, helping others, etc.

Again, looking back at Exhibit 1, facing the challenges of optimizing segmentation against sameness will require future HR leaders to operate well beyond the traditional inner circle of the HR function and profession. They will need to reach across organizational boundaries, combining the expertise of marketing, operations management and human resource management. They will need to be attuned to distinctions across organizational groups and social networks, and how environmental changes affect the preferences and responses of different employee groups.

Fatigue to Sustainability

The fifth future HR trend is the shift from fatigue to sustainability. This shift encompasses several dimensions. The first dimension is employee fatigue, which is a topic that has seen a lot of press lately. Employees are, to put it simply, just plain exhausted - physically, emotionally, and psychologically. This exhaustion is a result of many factors, including the economic downturn over the past few years, cutbacks, layoffs, doing more with less, and 24/7 email, to name a few. Basically, people are tired, and it seems that there is no relief in sight. A recent *Organizational Dynamics* article on the trend of chronic sleep deprivation in contemporary workers asked the simple question, "Are you wearing out your employees?" The recent stories about air traffic controllers working by themselves on overnight shifts and falling asleep (with headlines like "NTSB urges fatigue-fighting strategies for air traffic controllers") illustrates one extreme example of burnt-out employees.

The second dimension to this trend is an increasing emphasis on sustainable performance – environmental and otherwise. We would argue that the connection between these two dimensions is clear – and vital. Triple-bottom line sustainability ("People, planet, and profit") requires organizational viability and continuity, which in turn require individual employees who have the energy and vitality to deliver sustained performance over time. Beyond that, one part of triple-bottom line sustainability is focused directly on social sustainability, which includes the way an organization treats its workforce. This

can take the shape of a company like Gap Inc. working with multiple external stakeholders to uphold labor standards and human rights in factories that are not directly owned by the company; it can and must also include making sure that employees are not continually burnt out and overextended. Burnt out, fatigued employees are unable to build sustainable performance or help to make an organization or an environment more sustainable; thus, our organizations, through the HR function, need to help workers fight off fatigue, take better care of themselves, and revitalize for sustained long-term performance.

Despite the increasingly evident relationship between sustainable employee and organizational performance on the one hand, and triple-bottom line sustainability on the other hand, very few HR executives see themselves as having a significant role to play in the sustainability debate. Most HR leaders that we encounter categorize sustainability as being in the purview of operations, environmental health and safety, and/or public affairs. To be sure, HR leaders stand ready to respond to the sustainability imperatives that these other disciplines may identify, by providing HR systems that appropriately attract, develop, reward and motivate employees to participate and contribute. Yet, when seen in light of such things as employee fatigue, labor relations, and the employment brand, there is clearly much that HR can offer in a leadership role on this issue. Already, it is common for employment applicants to consider an organization's sustainability reputation in choosing among competing employers. Still it appears that most HR leaders have yet to embrace sustainability it as an HR issue and claim it. Harmon, Fairfield, and Wirtenberg, in their article on sustainability, write that their results from looking at HR leaders show that "HR executives overall are only moderately active in embracing sustainability." HR will find it increasingly difficult to influence sustainable individual and organizational performance without also playing a key role in an organization's overarching sustainability efforts. In fact, we would even go so far as to say it is becoming a major employment branding issue. Does HR really want to be standing on the outside of this issue looking in?

The challenge of sustainability is quite apparent when we look back at Exhibit 1. Sustainability issues will not be addressed at any one level. Perhaps more than any other emerging trend we have discussed, sustainability clearly requires skillful integration from the HR function to the organization and to the dynamic environment. Each organization will find that sustainability manifests itself differently across these three levels. To be sure, in most organizations today, sustainability does not naturally reside within the HR function itself, and it may never do so. However, that is not a reason that future HR leaders should not engage across all three concentric circles to make significant contributions to this important issue.

Persuasion to Education

Traditionally, the future of HR has been defined in terms of its ability to persuade often doubtful constituents to adopt programs or invest time, money and energy, in the initiatives that HR leaders have identified as valuable, but whose value is often obscure to those without a more formal background in HR. The future of HR is likely to be defined more by education than persuasion.

Results from a survey of HR leaders in 2006, conducted by the Center for Effective Organizations, showed that one of the lowest-rated items was the effectiveness of HR practices in "educating business leaders about the quality of their human capital decisions." It appears that one reason talent decisions are only of moderate quality is that HR systems have not yet evolved to effectively help leaders improve these decisions.

A mental model is an explanation of someone's thought process about how something works in the real world.

Non-HR leaders' experience and training is often grounded in logical frameworks and tools from disciplines outside the domain of human resources, so mental model theory suggests it may be useful to draw upon those other disciplinary frameworks to improve the quality and usefulness of mental models

regarding HR decisions. Decision makers certainly have mental models that guide their HR decisions, but they may be less adequate to the task because they are constructed on a less well-established or well-accepted foundation. The frameworks of research on human resources are less familiar to organization leaders than those for consumer behavior, operations engineering or finance. Those latter models are likely to be richer and more evidence-based if only because leaders use them more, or have been trained more deeply in them. Taking elements (e.g., schemas, relationships, evidence connections) from the richer mental models of other disciplines and retooling them to apply to human resource decisions may enhance human resource mental models and their capacity to make use of evidence.

For example, it is not unusual for organization leaders to be quite comfortable in expecting HR to deliver high-quality talent on short notice, at a competitive cost, and without requiring the organization to suffer any shortages or surpluses of employees. Yet, if we reframe this mental model by changing it to more traditional resources, we can tap a richer mental model. What if leaders said to their supply-chain function "I expect you to deliver high-quality raw materials on short notice, at a competitive cost, and I don't ever want to experience a shortage, nor do I want to hold any surplus inventory." In our experience, leaders immediately realize that their experts in supply-chain would never simply agree to such a request, but would instead help the leader to understand how to optimize the supply-chain process to achieve the right level of cost, risk and shortages or surpluses. It is then a short step for leaders to realize that it may well make sense to plan for employee shortages when talent may be readily available or when it is highly economical to hire in batches and take a risk on a short-term shortage, or to create employee surpluses when talent is vital and in short supply. The oil industry project engineering firm, IMV Projects, for example, is reportedly hiring engineers for work that doesn't yet exist, betting that rising oil prices will create work soon enough in the future to make the bet worthwhile.

The unexpected financial market meltdown of 2008 may have been caused in part by organization and regulatory decisions based upon mental models inaccurately assuming that certain extreme situations were impossible (i.e., because they had never been experienced by key decision makers). There are similar risks to inadequate mental models in the arena of human capital. For example, mental models that view human resources mostly as costs can lead to squandering less tangible long-term value in an effort to reduce short-term expenses. Or, mental models that presume it is possible to acquire qualified human resources very quickly and at reasonable cost (perhaps because the HR department has always delivered on this promise) can lead to lost opportunities that might come with better long-term planning and action.

Even when inadequate mental models about human resources are widely shared (e.g., turnover is bad and should be reduced), their dangers may be avoided by casting them into the light of a superior mental model from another discipline. The evidence of a successful mental model transformation might be measured by observing how leaders' insights become more sophisticated, such as when "turnover is bad and must be reduced," is replaced with "Employee turnover has benefits and costs just like inventory turnover." "Strategic staffing means filling my requisitions quickly and allowing me to wait until I am sure I need the employees" becomes "Failing to plan and make requisitions well in advance is just like leaving decisions about adequate raw materials until the last moment." Mental models focus organization and leader decisions, so enhancing mental models about human resources has the potential to improve that focus, and thus improve how evidence is gathered, analyzed and used. Efforts to develop internationally accepted HR standards, such as the efforts by the U.S. Society for HR Management working with ANSI and ISO, are often focused on standardized measures of common HR issues such as turnover and performance, but may have the potential to develop shared mental models for the HR profession.

How will HR leaders become adept at understanding and then influencing leader mental models? Again, look back at Exhibit 1. The answer is to look "Beyond HR" and redefine HR's mission to include enhancing the quality of human capital decisions, wherever and by whomever they are made. That means considering that some vital decision makers will reside outside the HR profession, and may even lie outside the organization boundary. It means understanding that the dominant mental models that decision makers use when addressing human capital decisions may draw upon disciplines and experiences that can only be understood at the organizational or environmental level. Yet the promise of future HR may well lie in part in a future in which not only is HR doing excellent work, but organizations and their constituents are "smarter" about employment and human capital as a result.

Conclusion

The trends discussed in this article are by no means the only ones that will be on the HR function's radar screen in the coming years, but we believe they will be some of the most important issues that HR professionals will be facing. As we have shown, the future will require that HR approach its dilemmas at multiple levels, that it draw on disciplines well beyond its traditional expertise, and that it be prepared to accept that the HR profession may or may not be the primary leader in these significant issues.

In this article, we have purposefully tried to look outside the middle circle of Exhibit 1, to emphasize how the future of HR will be defined and optimized through multiple levels, and the value of looking beyond the HR function as the profession defines its future. Yet, as we conclude, it is interesting to look within the middle circle because the trends and patterns that we have identified suggest significant implications for the function itself.

First, we foresee the HR function defining its deliverables in a significantly different way. In the past, and today, HR strategies often focus on some combination of talent, organization, culture, and

leadership. Today, the talent deliverable often refers to the processes that make up the talent lifecycle, such as sourcing, acquiring, deploying, engaging, developing, etc. In the future this will be extended to include the quality of talent decisions made by leaders and others outside the HR function. Today, deliverables in the area of organization often focus on managing change from one organization design to the next. In the future, this will be extended to a capability to thrive on constant change, and a concept of organization design that is more about the relationships embodied in formal and informal networks than about formal structures or matrices. Today, deliverables in the area of culture often focus on broad aspirations such as "high performance," "integrity," or "innovation." In the future, this culture deliverable will increasingly draw on anthropology, with a keen eye for myths, symbols, and unstated assumptions, and will accept the idea of multiple organization cultures, approaching culture as a way to embed unique and hard-to-copy capabilities in organizational values and routines. Today, deliverables in the area of leadership often focus on preparing and developing the top executive cadre. In the future, this leadership deliverable will increasingly focus on leadership at all levels and in many different roles, defining leadership not as a set of generic competencies or development experiences, but as the collective capacity of individuals to embody and encourage sustainable values and dynamic change in whatever position they occupy.

Second, supporting these deliverables will be an HR organization that will draw upon today's HR roles (such as business partner, employee advocate, functional expert and process owner) and the questions of whether to insource/outsource and standardize/customize. The future organization will address more directly the "white spaces" that are required by the challenges we described above. For example, despite the recognized importance of having HR stimulate deep analysis of business strategy to identify the truly pivotal talent segments, it is often difficult to find any HR role that focuses on that capability. Today's business partners are often a combination of process architects, confidante's to their line-leader clients, or administrative expert. Another example is the role of "educator" in such principles

as motivation, learning and engagement. Again, while today's roles add a great deal of value, functional experts in HR are often more focused on developing and implementing best-in-class HR programs than on elevating the knowledge and capability of those outside the HR profession in these essential areas. The questions of where to standardize versus customize, what elements to move to shared services, and where to centralize versus decentralize will in the future be approached not as either-or choices, but as nuanced decisions based on a common understanding and measurement of the unique value that each type of design element can offer in a particular context. As we noted earlier, the very boundary of the HR function is likely to be far more permeable and undefined, as functions such as strategy, marketing, communication and operations increasingly recognize the importance and applicability of their frameworks to managing human capital.

Third, HR competencies will evolve. The traditional array of competencies focused on the technical capability to design and implement HR programs, and the capability to understand and mitigate risks in areas such as legal and contract compliance. Today, we already see an expansion of these competencies to include elements such as analytics, measurement and project management. We foresee a future in which competencies in areas such as storytelling, education, and the logical frameworks used by other business disciplines (e.g., risk-management, supply-chain, and market segmentation) will become more prominent. As we noted earlier, these competencies may arrive not through the development of HR professionals per se, but through the inflow of leaders from areas such as strategy, marketing, and communication.

While many of these issues are emerging and unpredictable, the broad pattern shows that HR will need to evolve in many important areas. Now, it's time to retool. Stay tuned.

Selected Bibliography

An interesting treatment of the connections between HR management and corporate social responsibility is available in E. Cohen's *CSR for HR: A Necessary Partnership for Advancing Responsible Business Practices* (Greenleaf Publishing, 2010).

An in-depth case study showing how HR can use principles from other management disciplines is IBM's use of supply-chain principles to design and implement a global workforce inventory system is available at the Society for Human Resource Management website: see J. W. Boudreau, *IBM's Global Workforce Initiative* (Washington, D.C.: Society for Human Resource Management, 2010). Other management tools for managing risk and optimizing investments, such as market segmentation, portfolio analysis and engineering tolerance analysis can be applied to HR as well, as Boudreau describes in *Retooling HR: Using Proven Business Tools to Make Better Decisions about Talent* (Boston: Harvard University Press, 2010).

Techniques for data and analysis that involve measures beyond numbers, including qualitative input such as focus groups, are described by Marshall and Rossman in *Designing Qualitative Research* (3rd Ed., London: Sage Publications, 1999.). An interesting treatment of how work is becoming more collaborative and less bounded by organizations is in Adler, Kwon, and Heckscher's "Perspective—Professional Work: The Emergence of Collaborative Community," *Organization Science*, 2008, 19(2), March-April, 359-376.

An insider's look at how GE integrates people, strategy and some innovative approaches to connecting talent and social responsibility, including assigning the former head of the Crotonville learning center to GE's "developing health globally" initiative, can be found in the book by William Conaty (formerly the Chief HR Officer of GE) and Ram Charan, *The Talent Masters: Why Smart Leaders Put People Before Numbers* (New York: Random House, 2010). The idea that future leadership may come from anywhere in the organization, and will be collectively shared is nicely described in the

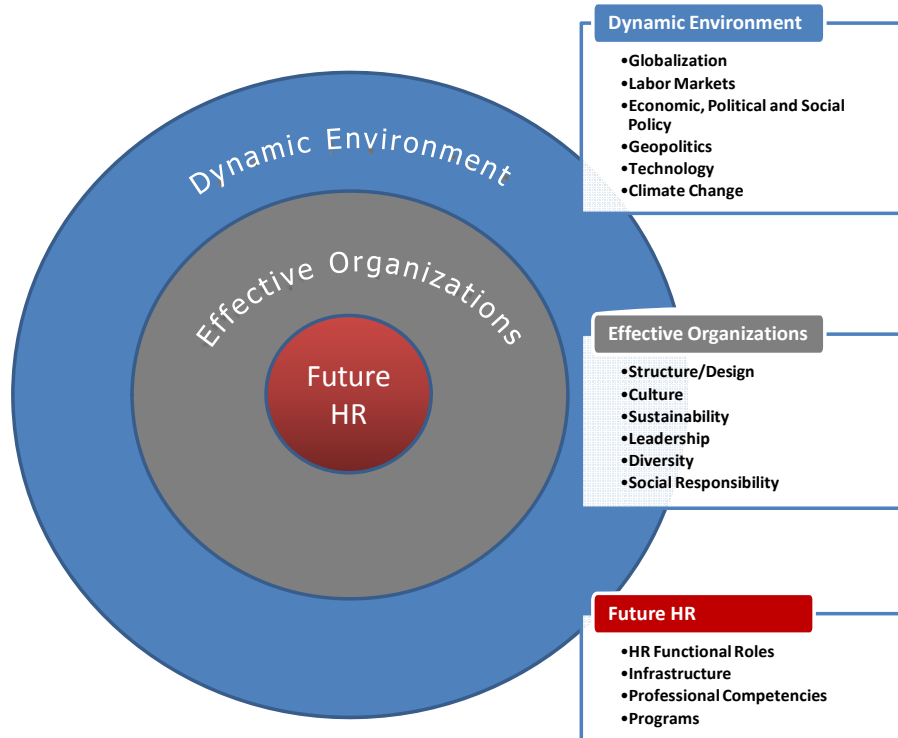
chapter, "The Promises and Pitfalls of Shared Leadership," by James O'Toole, Jay Galbraith and Ed Lawler, among several interesting chapters in the book edited by C.L. Pierce and Jay Conger, *Shared Leadership: Reframing the Hows and Whys of Leadership*, (Thousand Oaks, CA: Sage Publications, 2003), and in the chapter by Susan Albers Mohrman and Arienne McCracken, "A Physician Turned Leader Commits to Building an Award Winning Organization," among others in the forthcoming compilation edited by Warrick and Mueller, *Lessons in Leadership: Learning from Real World Cases* (Chicago: Rossi – Smith, 2011).

The connection between HR and sustainability is discussed in several articles in the journal *HR People & Strategy* (see issue #1, volume 33, 2010), including two in particular: J. Harmon, K. D. Fairfield, & J. Wirtenberg's "Missing an Opportunity: HR Leadership and Sustainability," and R. Sroufe, J. Liebowitz, & N. Sivasubramaniam's "Are You a Leader or a Laggard? HR's Role in Creating a Sustainability Culture."

Executive Summary

The future of HR is bright but challenging, and will be shaped much more by its context and permeability than ever before. Future leaders will see a future HR less as a defined organization function providing strategic acumen, key services and operational excellence. Rather, future HR and non-HR leaders must come to grips with a reality in which HR exists as much in the organization and environment as it does within the HR function, where concepts such as leadership, employment, and strategic success are fundamentally redefined, and where the HR profession's logical frameworks and mental models will as often arise from areas such as storytelling and anthropology as they do from the traditional areas of psychology and economics. Our observations are based on evidence from executive working groups, interviews, and reviews of existing research and thought-leadership. We provide a multi-level framework for understanding the future of HR, and we describe six trends that seem poised to define that future: (1) Hero Leadership to Collective Leadership; (2) Intellectual Property to Agile Co-Creativity; (3) Employment Value Proposition to Personal Value Proposition; (4) Sameness to Segmentation; (5) Fatigue to Sustainability; (6) Persuasion to Education.

Exhibit 1



Author Biographies

John Boudreau is Professor and Research Director at the University of Southern California's Marshall School of Business and Center for Effective Organizations. His research illuminates the bridge between human capital, talent and sustainable competitive advantage. His more than 60 books and articles include *Retooling HR*, *Beyond HR* and *Transformative HR*.

Ian Ziskin is President of EXec EXcel Group LLC, a consulting firm that builds individual and organizational credibility through human capital strategy, leadership & talent development, and organizational transformation. He is Executive in Residence and advisor to the University of Southern California's Center for Effective Organizations at the Marshall School of Business.