Leveraging the Talent-Driven Organization

Richard Adler
Rapporteur

THE ASPEN INSTITUTE

Communications and Society Program
Charles M. Firestone
Executive Director
Washington, DC
2010

To purchase additional copies of this report, please contact:

> The Aspen Institute
> Publications Office
> P.O. Box 222
> 109 Houghton Lab Lane
> Queenstown, Maryland 21658
> Phone: (410) 820-5326
> Fax: (410) 827-9174
> E-mail: publications@aspeninstitute.org

For all other inquiries, please contact:

> The Aspen Institute
> Communications and Society Program
> One Dupont Circle, NW
> Suite 700
> Washington, DC 20036
> Phone: (202) 736-5818
> Fax: (202) 467-0790

Charles M. Firestone	Patricia K. Kelly
Executive Director	*Assistant Director*

The Aspen Institute
One Dupont Circle, NW
Suite 700
Washington, DC 20036

Published in the United States of America in 2010
by The Aspen Institute

Printed in the United States of America

ISBN: 0-89843-519-6

10-004

1767CSP/10-BK

Contents

Foreword

The following is a report of the second roundtable in our series on Talent Development. We use the phrase "talent development" with great caution. It is not meant in the usual Human Resources sense of attracting and training personnel. Rather, it is meant to convey the centrality of talent to the 21st century organization. Indeed, we think now of the "talent-driven firm," one whose organizational function has moved from producing scalable efficiencies to solving problems in a flexible and adaptive way.

The first report in this series, Richard Adler's *Talent Reframed* (Aspen Institute 2009), sets forth this thesis, that the new talent-driven firm is one that provides conditions for talent to learn, collaborate, and make decisions utilizing social networks and other tools that characterize our digital age. The talent of today expects to learn constantly, to grow steadily, and to exert leadership where he or she can. Structures and strategies need to follow suit.

This report goes the next step. In July 2009, the Aspen Institute Communications and Society Program brought together 19 top-level executives and thought leaders to discuss how, during a time of diminishing resources, firms and organizations can leverage their assets to access talent and knowledge inside and outside the firm, and create workscapes that encourage learning, problem-solving, and leadership.

The intellectual underpinning of this series comes from the work of John Hagel and John Seely Brown, co-directors of the Deloitte Center for the Edge. Together with John Davidson, they published an article in the *Harvard Business Review* suggesting that there is a Big Shift taking place in American business. Despite significant increases in worker productivity over the past four decades, the financial performance of American companies has declined broadly over the same period of time. The characteristics that enabled businesses to create scalable efficiencies for much of the 20th century have now become obstacles to flexibility and adaptation needed in the 21st century.

As Richard Adler reports in the following pages, today's leaders need to build a culture of experimentation that fosters problem solving and continual improvement. That is the kind of environment that will

attract and retain talented workers of the future because it allows them to get better faster. Instead of scaling operational efficiencies, the report suggests, the 21st century firm must figure out how to scale learning.

The report details how a number of firms are using social networking tools to open up communication, collaboration and learning across boundaries, leveraging these tools to develop new products and real-time solutions for customers. It discusses the qualities of leadership throughout an organization that foster innovation and learning. And it touches on some of the policies that governments will need to consider to foster a competitive workforce in this new era.

Acknowledgments

Charles M. Firestone
Executive Director
Communications and Society Program
Washington, D.C.
January 2010

Leveraging the Talent-Driven Organization

Richard Adler

Leveraging the Talent-Driven Organization

Richard Adler

The Big Shift

Something has happened that has resulted in a fundamental change in the world in which business is conducted. The firm that was created for scalable efficiencies for the production of goods and services is not constructed for the digital world of 21st century business. In an article in the *Harvard Business Review*, John Hagel, John Seely Brown and Lang Davison of the Deloitte Center for the Edge, call this change "the big shift," a long-term trend in the global business environment that goes well beyond the impact of the economic crisis of the recent past. They have created a "Shift Index" that attempts to identify and quantify the components of these deeper changes and document their impact on business performance. The index is made up of three main sub-indeces: technological *foundations* that constitute the infrastructure in which businesses operate and compete with each other; the *flows* of resources (particularly knowledge) enabled by technology that are vital to the operation of all organizations; and *impacts* of the foundations and flows that are "reshaping the economic playing field."

The most fundamental driver of change, according to the authors, is the inexorable increase in the capabilities of the digital infrastructure that plays an increasingly central role in how business is conducted. The power of each technological component of the infrastructure that make up the *foundation index*—computing capabilities, storage capacity, and transmission bandwidth—has been increasing exponentially and seems likely to continue to do so.

In this respect, digital technology is distinctly different from previous technological innovations. While previous technologies also triggered substantial economic revolutions, each one evolved at a relatively moderate pace after its initial invention. By contrast, the capabilities of digital technologies have been increasing exponentially for several decades and show no signs of slowing down.

In addition to increasing capabilities, the reach of the digital infrastructure is also growing as measured by the growing number of Internet users and wireless subscribers. This further magnifies its effects.

The growing power of digital technology is hardly news. But the next component of the index attempts to describe the significance of this growth in terms of the rate at which resources can be moved from one location to another. This *flow index* includes "physical flows" such as the total volume of transportation and the movement of capital (in the form of foreign direct investments in and by U.S. companies). It also includes "virtual flows" such as the increase in knowledge sharing across companies and the growth of active participation in social media, all which have also been rapidly increasing in volume and intensity.

> **…the same factors that were responsible for the success of businesses in the 20th century are "killing us" in the 21st century.**
>
> *John Hagel*

The third component of the index is intended to quantify the implications of these changes for people, for markets and for individual firms. The data that make up this *impact index* reveal some surprising and disturbing trends. They suggest that the performance of American businesses has been declining at the same time that the technical capabilities available to them have been improving. For example, overall rate of return on assets (ROA) for public corporations in the U.S. has fallen for the past four decades, from an average of 4.72 percent in 1965 to just 0.52 percent in 2008. Among the best performing firms—those in the top quartile—ROA has declined slightly, from 13 percent to 11 percent over the past four decades, while ROA for firms in the lowest quartile fell from +one percent in 1965 to -15 percent in 2008.

At the same time, the "topple rate" at which major corporations lose their leadership positions has increased more than four-fold as the average tenure in the S&P 500 has fallen from 75 years in 1938, when the metric was first devised, to 35 years in the mid-1960s, to just 15 years today. Since this index is composed of the country's largest corporations, this statistic strongly suggests that the advantages conveyed by the sheer size of an enterprise no longer are as important as they were in the past. John Hagel, the co-chair of Deloitte's Center for

the Edge, summed up the message from the index by asserting that the same factors that were responsible for the success of businesses in the 20th century are "killing us" in the 21st century.

Inside the Shift

Deloitte's Shift Index provides an introduction to an exploration of the challenges facing business today and the characteristics that are necessary for success in the 21st century. These challenges were the focus of the 2009 Aspen Roundtable on the topic of "Leveraging the Talent-Driven Organization in a Time of Economic Crisis."

The Roundtable began by considering why improvements in the technological infrastructure of computing and communications should have such a strong negative impact on business performance. One obvious explanation is the increasing intensity of competition. Internationally, the "flattening" of the world due to pervasive instant communications has enabled businesses to compete from virtually anywhere on the planet. It may well have been the case that for a brief time after World War II, America was an island of innovation that dominated world trade and produced unprecedented domestic prosperity. But eventually America's lead narrowed as key technologies and the ability to use them effectively became broadly diffused. In many cases, the success of foreign competitors came at the expense of American enterprises.

The intensity of competition has increased domestically as well as internationally. As key information and communication technologies have gotten cheaper, more powerful and easier to use, traditional barriers to entry have fallen sharply everywhere. The cost of starting up a new firm has declined, and small firms (or even individuals) are better able to compete on a level playing field with larger firms. Few competitive advantages have proved to be sustainable over the long haul.

To cite one conspicuous example of this shift: the proliferation of digital media has radically changed the economics of publishing, eroding the effective monopoly on production and distribution of such things as news, music and video content that was enjoyed by major publishing companies. As a result, many large media companies that were once highly profitable are struggling to find a strategy that will allow them to survive.[1]

A similar pattern can be found in other industry sectors, particularly those that involve a significant amount of knowledge creation and exploitation. In fact, one component of the Shift Index shows that the "intensity of competition" across the entire economy has, more than doubled over the past four decades. According to John Hagel, the change is so great that the traditional corporate strategy of building and then protecting "stocks of knowledge" is no longer viable; instead, businesses must learn to participate in ongoing "flows of knowledge" that are becoming critical sources of value. As the pace of change increases, the value of existing information is continuously declining. The only option for remaining competitive is for companies—and their employees—to continue to learn and to generate new knowledge.

> **…protecting "stocks of knowledge" is no longer viable; instead, businesses must learn to participate in ongoing "flows of knowledge…."**
>
> *John Hagel*

The old imperative for business was to keep getting bigger in order to achieve "scalable efficiencies." In fact, this model of the corporation has its origins in the early 20th century when companies "discovered how to harness the capabilities of newly emerging energy, transportation and communication infrastructures to generate efficiency at scale."[2] With the increasing pace of change spurred by the emerging digital infrastructure, this strategy creates less flexibility and less leverage for innovation. Or, as Maryam Alavi, The John M. and Lucy Cook Chair in Information Strategy at Emory University, put it, core competencies can turn into core rigidities when the environment changes.

The Roundtable participants suggested other factors not directly related to the effects of information technology may have also played a role in the declining performance of American business. Ann McLaughlin Korologos, Chairman Emeritus of the Aspen Institute, former U.S. Secretary of Labor, and member of the boards of several major U.S. corporations, argued that the increase in rules and regulations that place constraints on how businesses operate—and particularly labor laws that affect workers in the workplace—could bear part of the responsibility for diminishing their profitability. Vijay Thadani, Chief Executive officer of NIIT Limited, a global training firm based in

India, suggested that the "stagnation of the education system" and its failure to properly prepare students for the challenges of the current marketplace, is another potential contributor to the decline in business performance. The skills that students have traditionally acquired through their formal education may no longer be as valuable as they once were in the corporate world.

Steven Spear, Senior Lecturer at MIT, suggested that an explanation for diminishing return on assets may be that "assets have become commoditized as markets for them have internationalized and information about them has become more readily available." Therefore, holding assets is less a source of competitive advantage. It's how they are put to use that matters more than ever. Richard Adler, Research Affiliate at the Institute for the Future (and author of this report) pointed to the rising burden on employers of the cost of health care, which has doubled as a share of GDP over the past 30 years.[3]

The Dilbert Paradox

Another potential explanation for the declining performance of American businesses is the poor job being done by employers in supporting their most talented workers, a phenomenon that John Hagel described as "the Dilbert paradox." While top management of most companies says that managing talent is an important priority, the reality is that many workers are frustrated and alienated by the conditions they find in their workplaces. The brightest and most talented workers—those that are most passionate about what they do—are often those who are most dissatisfied with their jobs. Rather than being empowered by their work environments, talented workers are too often hampered in their attempts to take risks, learn new skills, or find innovative solutions to the problems they encounter.

Survey data included in Deloitte's Shift Index show that there is an inverse correlation between the size of a firm and the degree of engagement among its employees: smaller firms have a significantly smaller percentage of workers who identify themselves as "disengaged" from their jobs and a larger percentage of workers who are "passionate" about their jobs. And the percentage of people who say they are passionate about their work is highest among those who are self-employed.[4]

Why is this? What is it about large firms that discourages talented workers? An online presentation from Netflix, the company that pioneered direct rentals of DVDs and that puts strong emphasis on attracting and supporting high performance employees, offers a simple explanation of what typically happens as companies get larger and more complex.[5] When a firm is small, it can operate informally and its employees are able to play many different roles. It is precisely the freedom to innovate that attracts talented workers to this type of environment. But as a firm becomes successful and grows larger, the complexity of its operations also increases. The result is often an increase in "chaos" as the firm outgrows the ability to operate on a more informal basis. Since no one likes chaos, the natural response is for managers to devise and impose more and more procedures that enable businesses to operate in an orderly manner. Rules are developed that specify how things should be done and roles become more rigid. In the short term, these "process-driven" firms can achieve a high level of efficiency that allows them to prosper. However, codified procedures tend to curtail the freedom of individuals and have the unintended consequence of alienating and eventually driving away the most creative high performance employees. When market conditions change, these companies find themselves unable to change because their workforce is mainly good at "following existing processes" rather than reacting creatively to new circumstances. In the worst case, these companies "grind painfully into irrelevance, due to their inability to respond to the market shift." In other words, core strengths become core rigidities.

Toward New Institutional Forms

According to this analysis, the only alternatives for a firm seem to be either to stay intentionally small and informal in order to keep talented employees happy and engaged, or to manage the complexity that comes with size by developing rules and procedures that create efficiencies but discourage individual initiative and alienate the very workers whose talents are critical to the firm's long-term survival.

A third alternative is to create a new model of the firm that creates a supportive environment for creativity even as a firm grows larger. Mark Yolton, Senior Vice President of SAP, proposed a model that con-

trasts the key characteristics of traditional 20th century corporations with those of a 21st century firm that reflects this third way:

20th Century Firm	21st Century Firm
Vertically integrated	Horizontally networked
Top-down leadership	Distributed responsibility
Build the ultimate product	Continuous improvement
Gain efficiency	Scale learning
Hoard information/build IP	Share information
Experts	Learning new skills
Lone hero	High performance teams
Security	Transparency
Push	Pull

The traditional 20th century firm operates in a hierarchical, command and control mode in which decisions are made at the top and are passed down the chain of command for execution: leaders decide what to do, and workers do it. Success comes from designing, building and distributing the best possible product in the most efficient way possible. Superior performance is based on having superior knowledge that resides in the hands of a cadre of expert professionals and is typically guarded by layers of security and protected by a phalanx of patents.

The structure of the 21st century firm is quite different. Instead of pursuing vertical integration, it fosters the development of horizontal networks both inside and outside the firm's boundaries. Decisionmaking responsibility, rather than being concentrated at the top, is distributed throughout

"The person who sweeps the floor should pick the broom."

the firm, with decisions ideally being made by those most directly affected by them. "The person who sweeps the floor should pick the broom." Instead of depending on the ability of a few "lone heroes," the success of the 21st century firm is built on the effectiveness of multiple

high performance teams, some of which may exist only long enough to take on and solve a particular problem, and may involve people outside of as well as inside the firm.

Rather than striving to increase efficiency across a company's operations through standardizing and automating operations, the 21st century firm seeks to scale opportunities for learning and maximize opportunities for its employees to discover what the market wants and how that demand can best be met. This is accomplished, not by building and guarding stocks of proprietary knowledge, but by being willing to share information openly with and learning from others externally as well as internally.

Clearly, this new model is dramatically different across multiple dimensions from the great majority of existing companies. Moving from current realities to this new paradigm would seem to be a daunting challenge for most firms. But the Roundtable participants related stories of major corporations that have achieved great success following the traditional rules. These organizations have also recognized that the environment has changed and have therefore taken significant steps toward transforming their culture and their ways of doing business.

For example, Procter & Gamble, which had long prided itself on the ability of its in-house research and development (R&D) capabilities to create new blockbuster products, has begun to look to external partnerships as sources of innovation. Starbucks, which built its initial success on the vision and marketing skills of its top management, is now inviting its customers to contribute ideas for new products. And NIIT Limited, a global corporate training company based in India, has developed a series of "clubs" that cut across traditional functional lines in order to expand and accelerate innovation.

Procter & Gamble's Connect and Develop Strategy. For many years, P&G maintained its position as one of the top U.S. consumer products companies by relying on its world-class R&D capabilities to create a stream of distinctive new products. But by the year 2000, having reached some $70 billion in annual revenues, its R&D productivity had leveled off even while R&D costs continued to increase. According to Laura Mattimore, Director of Leadership Development at P&G, company leadership concluded that "it was no longer true that a group of

people in Cincinnati had all the answers." They recognized that for every researcher employed by P&G, there were perhaps 200 others around the world who were equally smart and creative. The company's new Chief Executive Officer, A.G. Lafley, set a goal for P&G to acquire half of its innovations from outside the company, a radical departure from its past practices.

Through its new strategy of "connect and develop," P&G annually identifies the top consumer needs that will drive the future growth of its brands. The company translates these needs into "science problems to be solved," then uses multiple networks to seek ideas for solutions. Sources for innovation include a proprietary network linking the company's 15 top suppliers, who collectively employ some 50,000 researchers, and several "open" networks including NineSigma, InnoCentive, and Yet2.com. By 2006, more than one-third of new P&G products included elements that originated outside the company. The company's innovation productivity rate has increased nearly 60 percent, and the overall cost of innovation has decreased. In a description of its new strategy, the company asserts that "for most companies, the invent-it-ourselves model is a sure path to diminishing returns...we believe that connect and develop will become the dominant innovation model in the twenty-first century."[6]

Starbucks Customer Initiative. Like P&G, Starbucks undertook a major strategic shift in response to a sharp downturn in its performance. In 2008, after an eight-year absence, Howard Schultz resumed the role of Chief Executive Officer of Starbucks at a time when the company seemed to have lost its momentum and was struggling to recapture the success that it had long enjoyed. Schultz announced that his top goal was to "restore the distinctive Starbucks experience." But rather than trying to define this himself or depend solely on his management team to come up with all of the answers, he decided to reach out and engage the company's 180,000 employees (known within the company as "partners") as well as its more than 50 million customers.

In March 2008, the company launched mystarbucksidea.com. This is a web site modeled after Dell's IdeaStorm, which had been introduced a year earlier. Like the Dell site, mystarbucksidea is an "online community" that invites customers to suggest ideas for new products

or services or for ways to improve existing products or services. Users can also comment on the ideas suggested by others and vote for the ideas they like best. Anyone can view ideas on the site, but people are required to register in order to post or comment on suggestions. A blog provides a place for employees to discuss ideas that have been submitted and report on ideas that have been implemented by the company.

According to Starbucks Chief Information Officer Stephen Gillett, this platform has not only been a source of useful ideas, but has increased the level of engagement of customers and employees with the company. Mystarbucksidea.com is now seen by company management as a "primary channel in driving the agenda for the company's strategic plan."

NIIT's employee clubs. Indian companies tend to be strongly hierarchical. Yet these companies—and particularly those that operate in India's burgeoning high-tech sector—need to operate in the same global competitive environment that U.S. companies face. NIIT is a large corporate training firm that is based in India but operates globally. In an attempt to circumvent its traditional hierarchical structure and accelerate innovation, the company has supported the creation of a number of employee "clubs" that are focused on initiatives for change. According to NIIT CEO Vijay Thadani, the clubs are loosely structured and "informal" and bring together members from a variety of locations and business functions. They offer participants a chance to experience "the joy of taking on and solving a problem."

One of the first of these groups was the Managing Director's Quality Club. In addition to pursuing projects to improve quality throughout the company, the club undertook a Personal Innovation Initiative that was designed to encourage all employees to identify and solve tough problems. Another cross-functional group, the President's Club, played a key role in responding to the challenge posed by the Internet to the traditional model of education. This led to the creation of NIIT's NetVarsity which now provides online learning for all NIIT students in career training programs.

Membership in most NIIT clubs to date has been limited to employees invited by the company's top management. However, NIIT Brave Initiatives is an online forum where any employee can contribute suggestions for improving such things as business strategies, cost effective-

ness or productivity. Several major initiatives have come about as a result of this forum.

Another Indian company, Tata Consultancy Services (TCS), is also attempting to spur innovation by empowering its employees to take the initiative in identifying problems or opportunities wherever they may find them. Following the lead of Google, TCS allows employees to devote five hours each week to learning a new skill or pursuing a personal project. In 2008, TCS launched IdeaMax, an online site that lets any employee submit, comment or vote on ideas for the company. Since it was launched, IdeaMax has generated some 12,000 ideas, of which "several hundred" have been implemented. JustAsk, an online resource that lets employees ask questions and get answers, generated 10,000 questions and answers in its first month of operation.[7]

Rethinking the Role of Talent in the Firm

Alan Kay once observed that "a change in perspective is worth 20 IQ points." If the traditional model of the firm has become dysfunctional in the wake of "the big shift," what other perspectives are possible to look at the role of the firm and how it creates value? Cathy Benko, Vice Chair and Chief Talent Officer at Deloitte LLP, commented that we tend "to walk backwards into the future," remaining focused on how things have been done in the past rather than taking account of how things are now.

> **What fuels learning, is a passion to learn.**
>
> *John Seely Brown*

One key area of challenge—and opportunity—identified by Benko is the changing composition of the workforce. She noted that the workforce today is far more heterogeneous than in the past, not only in gender and ethnic background, but in areas such as family structure and individual values and expectations. This heterogeneity can be an asset if is tapped properly. But it also poses big challenges to developing programs for continued learning for workers, a need that is exacerbated by the ever-shortening lifetime of the value of what is learned.

John Seely Brown agreed that the ability to keep learning is a critical skill for everyone. But learning does not happen only (or even primarily) in formal training programs. Brown pointed to the world of computer games, where the prevailing attitude of players is "if I ain't

learning, it ain't fun."[8]   What fuels learning, Brown suggested, is a passion to learn that is more often found in informal settings than in formal educational programs. In a time of constant change, this attitude has become vital to success in the world of work as well, but it does not translate easily into contemporary corporate culture. As Steven Spear noted, the question for companies is whether top management is willing to allow their employees to experience "the joy of learning."

Few businesses know much about gaming culture or how to create environments that encourage continuous learning. Many companies talk about the value of collaboration and the importance of agility, but few companies really support these qualities. Ben Edwards, publisher of *The Economist*, warned that "the word 'talent' is problematic" if it leads us to focus solely on the potential of individuals. In fact, highly talented people can be disruptive to the effective functioning of teams in the workplace. If you are concerned with the performance of teams, then an individual's disposition—his or her ability to play well with others—becomes important.

Beyond the question of talent is the proper definition of a company's assets, Dwayne Spradlin, Chief Executive Officer of InnoCentive, proposed a radically different metric for evaluating a firm's true value. Rather than focusing on a company's tangible assets and its formal structure, a full accounting should include the value of "all of the communities that the firm touches." From this perspective, the role of a manager is to manage all of these communities, not simply a company's employees, to extract maximum value from them. P&G's effort to leverage its own assets by tapping the skills and expertise of its suppliers and other external resources in creating new products is an example of this more expansive approach. Starbucks' invitation to its customers to help build a better company is another. The following section offers more stories about companies that are reaching beyond their formal boundaries to create value.

Social Media and the Evolving Workscape

"Networks are workscapes," according to Maryam Alavi. What this means is that an increasing portion of the "real work" of business is being conducted online. In fact, what is taking place online goes well beyond the relatively simple and straightforward tasks of finding or

conveying information or conducting a transaction. With the recent emergence of new social media, the net is becoming a place where people can meet others (like themselves and not like themselves), learn from them, and work collaboratively with them to solve real problems.

The current generation of social media was conceived and began to develop in the non-commercial world of individuals, and particularly among young people, well outside the confines of the business enterprise. It is true that going back to the days of Lotus Notes, some firms had explored

"Networks are workscapes."

Maryam Alavi

the uses of "groupware" products intended to enhance communication and collaboration among company employees. But this type of software never achieved more than the most modest of impacts on the corporate world. Of far greater import was software that supported individual productivity (spreadsheets, word processors) or that automated key business functions (inventory, payroll, enterprise resource planning). These products succeeded because they were well aligned with companies' hierarchical structures and helped them to achieve the economies of scale that was the goal of most firms. By contrast, companies often rejected groupware products that promoted horizontal collaboration that ran counter to their hierarchical structures. More recently, corporate IT departments have typically responded to the emergence of social media with reactions ranging from indifference to confusion to outright hostility. Many corporate managers, who perceive social media as threatening to their ability to conduct business as usual, have been equally unenthusiastic.

Despite this instinctive resistance, the rapid growth of social media over the past few years has sparked considerable interest in its potential role in the business world. The take-up rate for social media in the corporate world has already surpassed the accomplishments of all previous generations of groupware. Perhaps the most distinctive characteristic of social media is its relatively unstructured, informal nature. It allows individuals to choose the role they wish to play and to communicate when and with whom they wish in order to accomplish their chosen goals.

Several participants in the Aspen Roundtable recounted success stories of how major corporations have made use of social media. But their stories demonstrate that these successes depend on the ability of

companies to adapt their culture to new ways of connecting and communicating with customers and other key groups.

SAP's Community Network. According to Mark Yolton one of the strengths of social media is its ability to "enhance talent" within (or outside) a company. He defined social media as "tools that provide platforms for the exchange of value" among individuals. He describes the use of social media in business in terms of the classic questions a reporter would ask:

- *Who* **is using social media?** A company's customers, partners, suppliers, job candidates, as well as employees, in order to engage and communicate with each other.

- *What* **are they using social media for?** To grapple with real-world problems and issues.

- *When* **are they using social media?** Anytime—at work or while traveling or at home or even while (supposedly) on vacation.

- *Why* **are they using social media?** To get help, for the joy of solving problems or learning something new, to earn recognition, for monetary rewards.

- *How* **are they benefiting from social media?** Through observational learning; learning by doing; learning from peers; learning from scientific observation (i.e., gathering data for analysis).

To illustrate these points, Yolton described SAP's experience in creating its SAP Community Network (SCN), which may be the most extensive use to date of social media by a corporation. There is some irony to the fact that SAP should be a pioneer in the use of social media. The company, which is based in Germany but operates globally, describes itself as "the world's leading provider of business software [which includes] enterprise resource planning and related applications such as supply chain management, customer relationship management, product life-cycle management, and supplier relationship management." These are the very types of software that have helped to shape the structure of efficiency-driven 20th century firms. But as the company's products

became more numerous and more complex, and as the number of its global customers and partners increased, the task of supporting and engaging with all of them through traditional channels became increasingly difficult and costly. And as the Internet emerged and evolved, it began to offer new possibilities for how the company operates.

Six years ago, SAP launched an online network for software developers who worked with its products. Developers were a logical starting point since they already operated in a culture of collaboration and sharing, were generally comfortable with using a variety of software tools, including social media, and were often early adopters of new technologies. Based on the success of this first foray into social media, the company began to "work its way up the stack." It launched similar networks for "adjacent communities" including business customers, analysts, and even university students who represent potential future employees or customers for the company's products. SAP now operates six different networks under the umbrella of SCN.

SAP's Community Networks

- SAP Developer Network - http://sdn.sap.com
- Business Process Expert Community - http://bpx.sap.com
- Business Objects Community - http://boc.sap.com
- SAP EcoHub - http://ecohub.sap.com
- University Alliances Community - http://uac.sap.com
- SAP TechEd & SAP Tech Tour - http://sapteched.com

Yolton provided some dramatic statistics on the reach and dynamism of SAP's networks. As of mid-2009, SCN had 1.7 million members from 200 different countries and territories, with some 30,000 new people joining each month. SCN has generated more than six million messages, and more than 6,000 new messages are posted daily, typically from people with "a quick question seeking a quick answer." What keeps the network active is its usefulness: Each question asked generates an average of 3.4 answers in a relatively short time, and users report that the answers they receive are generally of high quality.

SAP's networks are based on fairly standard message boards that support threaded discussions. As the volume of messages grew, it became increas-

ingly likely that the same questions would be repeated while past answers would get buried. To combat "answer fatigue" from too many redundant questions, all existing content is now searchable, and answers to the most commonly asked questions are put into FAQs in a wiki format.

Although SCN is based primarily on message boards, it also makes use of a variety of other social media tools. For example, a blogging tool is available, and more than 5,000 members—only one-third of whom are SAP employees—maintain blogs on the network. In an online interview, Yolton described how the company uses other social media platforms to support both online and offline activities like conferences:[9]

- We use Twitter to talk about events beforehand, during, and after a conference. Speakers share previews of their content before the conference. During events…it allows the people not present to stay up-to-date. We did a product launch in New York earlier this year and we sent some top contributors who polled a larger audience through Twitter at our press conference. Then we asked questions that came from Twitter of the person on stage—which we then webcast and tweeted out to the community.

- We use LinkedIn to promote events and give updates during events.

- We use Flickr so individuals can take their own photos and tag them and then the community can see them aggregated.

- We use community blogs for speakers to share presentation abstracts, ask questions of the audience before their talks, and to draw people to their sessions.

- Some of us use Facebook [as well as] Digg and other tools.

For some network users, participating is its own reward. But to provide additional motivation, and to help members identify the most valuable resources, SAP created a recognition system that grants "reputation points" for activities such as answering questions, posting information on a blog or presenting at a conference. Network members can get their SCN points listed on their LinkedIn profile.

Yolton noted that SCN provides significant benefits to SAP. One of the most valuable is its power to give employees at all levels of the company real-time insights into customer needs, interests and problems. And the prominence of SCN has had a positive impact on the perception of SAP as a company that is open and collaborative. Customers generally are happy when a supplier will really listen to them, a process that is inherent in the structure of SCN.

Starbucks on Facebook and Twitter. Following the success of mystarbucksidea.com, the technology and digital teams decided to expand Starbucks' presence on other social media platforms. Since this would have to be accomplished through viral marketing, it did not require substantial advertising or marketing dollars. By mid-2009, Starbucks had attracted more than 3.8 million fans to its Facebook page, making it the top brand on the site. Starbucks has also attracted more than 287,000 "followers" on Twitter by personalizing its "tweets" (they do not come from the company, but from Brad, a real person who works for the company), and by providing interesting and timely information about the company along with offers of special products (e.g., unique coffee blends) available only to Twitter followers. To promote a new product, the company used Twitter to promote Brad's "road trip" across the country, with links to video reports from different locations posted on YouTube.

Internal Networks. In a number of cases, the primary focus in the corporate use of social media has been internal. For example, in 2007, Deloitte launched a Facebook-like application called D Street for its own staff members.[10] Initially, D Street was made available to about 1,500 people, but it has now been opened up to all of the consulting firm's 46,000 employees. Each person's entry comes pre-loaded with basic contact information, but everyone is encouraged to customize their page with photos and additional information about themselves. According to Deloitte's Cathy Benko, the network was initially viewed by management as an "internal water cooler" that might be a nice thing for staff, but not necessarily valuable as a business tool. But as users began entering more information about their interests and experiences, it became a useful way to quickly locate people with specific skills and

talents inside the company. And individual users began to see it as a way to promote themselves inside the company through "their own storefront."

According to Dwayne Spradlin of InnoCentive, social media have the potential to fulfill the promise of leveraging a company's internal assets in ways that traditional approaches to "knowledge management" failed to realize. InnoCentive@Work is designed to allow companies to seek solutions internally to critical problems in new ways. Rather than assigning problems to small, specialized teams, I@W makes it possible to pose "challenges" to a company's entire workforce. Those who post a challenge are given a pool of points—a form of non-cash recognition—that they can award for good solutions. People who have good ideas, whether or not they have obvious credentials to address that problem, are free to offer their solutions. Those who do not know the solution can point to others who may have it.

One of the first companies to use I@W is a multi-national biotech company that had already been an early user of InnoCentive's public platform, and had enjoyed a high success rate in finding solutions to the problems that it had posted. According to a company executive, the value of the solution identified in the first external challenge posted on InnoCentive was greater than the cost of using the service for an entire year.

The company, which now posts 30 to 40 external challenges each year, has begun to use InnoCentive@Work internally. Like many other firms, there was relatively little horizontal communication among the company's research staff, even among those working in the same physical location. The goal of using I@W internally was to "open up the culture" and make the company more nimble. The network is being used by the company to solicit answers to specific questions from its own staff of several thousand R&D researchers before seeking external solutions. In some cases, I@W is also being used to refine the definition of a problem before it is posted externally.

By launching an internal application like this, a company is signaling that it wants to encourage employees to participate in a social network. In fact, Spradlin noted, most companies are not structured to "permission" employees to openly participate in social networks, either internally or externally. Introducing a social network—particularly if it is done with the support of top management—can communicate that

kind of permission, which can quickly lead to a kind of viral hyper-growth of networking use.

InnoCentive began as a platform for external open collaborative problem solving, and most of its use continues to be for external challenges open to anyone (as noted earlier, Procter & Gamble is one of the companies that is using the InnoCentive platform to find solutions to specific technical problems). The company's experience suggests that developing open external networks may be less fraught with constraints than internal networks, particularly within organizations that lack a culture of cross-functional sharing and collaboration.

Lessons of Social Media

Virtually all of the Roundtable participants who have attempted to introduce new opportunities for collaboration in their firms attested to the reality of corporate resistance—or, as Ben Edwards put it, "fear and loathing"—toward such initiatives. The more hierarchical an organization is, the more resistance there is likely to be. It is certainly true that the "real work" of a company often gets done through informal, horizontal networks, but such activities can, in fact, become disruptive as this reality gets de-coupled from a company's formal description of how things are supposed to work. According to Edwards, a strategy that energizes people horizontally may de-motivate people vertically.

Don Proctor, Senior Vice President of Cisco Systems, acknowledged that top management is often dubious about strategies that encourage informal connections among employees. Although Cisco would seem likely to have a culture similar to that of SAP, Proctor noted that proposals to introduce social media as business tools have typically generated responses like, "Why would I want to enable that in my company? It looks like a giant waste of time." Yolton acknowledged that opening up, either externally or internally, can be "shocking" to corporate management that is accustomed to seeing a company's intellectual property as assets needing to be carefully protected.

Stephen Gillett, who has been actively involved with developing new media channels for Starbucks since he arrived there, responded that you cannot just tell a company's leaders that "it's not cool not to be on Facebook." Rather, social media initiatives need to be framed in language that is consistent with a company's values. In his case, he started

out by focusing on the value of expanding the company's online presence in terms of brand awareness. Gillett noted that a by-product of the success of these relatively modest initiatives was that they helped break down the barriers of resistance to the internal use of social media.

Ultimately, innovations succeed when they are aligned with and reinforce corporate culture and fail when they do not. Steven Spear pointed out that while an online banking service worked well for Charles Schwab, a similar effort undertaken by Merrill Lynch was a failure. In hindsight, online banking was a service that fit with Schwab's "do-it-yourself" customer culture, but was incompatible with Merrill's "old school" model of personalized account management. Cathy Benko added that "network behavior is not separate from a company's other activities. It is dependent on corporate culture and it can be thwarted—or supported—by corporate culture."

> **"Network behavior…is dependent on corporate culture and it can be thwarted… by corporate culture."**
>
> *Cathy Benko*

One temptation that corporate management needs to learn to resist is the desire to exert tight control over what goes on online. This temptation is particularly strong for networks that involve open exchanges between a company's employees and external groups such as partners or customers. The best management strategy is often to set a general tone (e.g., to communicate the message that the network "is not a place to mess around"), then refrain from reacting to online activity that seems negative or inappropriate and let the members of the community deal with the issue themselves.

Unwanted behavior can also be discouraged by the design of the system. Ben Edwards described a series of online debates sponsored by *The Economist* that attracted as many as 50,000 participants from around the world. To reduce the likelihood of inflammatory ad hominem attacks and encourage civil discourse, all contributors were required to address their remarks to the debate moderator using a message submission form that automatically begins with the salutation, "Dear Sir" or "Dear Madam" (depending on the gender of the moderator). As Mark Yolton concluded, "you don't 'manage' a community; you 'orchestrate' it."

Language also matters in promoting new and unorthodox ventures. Several Roundtable participants suggested that the label of "social media" may be counterproductive, since "social" has pejorative connotations in the workplace. Vivek Wadhwa, Senior Research Associate at Harvard Law School, noted that in India, the Internet is often viewed as a potential distraction from "serious" activities: students who are preparing for important exams are often required to stop using the Internet. Wadhwa proposed that relabeling social media as "social learning networks" would make them much more acceptable to corporate managers.

"You don't 'manage' a community; you 'orchestrate' it."

Mark Yolton

Finally, Maryam Alavi suggested that the discipline of social network analysis (SNA) could provide useful insights into the impact of social media. Academic research has, for example, explored the significance of factors such as the strength of ties among network participants, the density of ties, the centrality of participants, and the importance of trust in facilitating knowledge sharing. Recently, SNA has begun to look at the ways in which social networks can incorporate nodes (i.e., provide access to "stock of knowledge") as well as facilitate access to people (i.e., support "flows of knowledge"). Research is also underway on how existing social networks can be extended or enhanced by information technology.[11]

Structures to Support Talent-Driven Organizations

Even if there were universal agreement about the need for enterprises to adopt a "talent-driven model" in order to remain relevant in the 21st century, there is still considerable uncertainty about how organizations can move from their present structures to this new model, particularly in light of the deep-seated tendency of corporate cultures to resist new ideas that are perceived as threatening to the existing order. The reality is that it is almost antithetical to the values of many corporate cultures to create an environment that encourages risk-taking and continuous innovation; to support transparency and open engagement with suppliers, partners and customers; and to create conditions that maximize opportunities for continuous learning throughout a firm.

To Skunk or Not to Skunk. One classic strategy for nurturing a project that may run counter to a company's traditional core values is to put it in an externally located skunk works in order to protect the fledgling operation from the firm's "corporate immune system" that will try to squash it. Or, as Mark Yolton put it, "it is dangerous to try to send 15 people into a group of 2,000 people and hope that they will win." Yolton says that when SAP began to develop its SAP Community Network initiative, the company housed it in a skunk works. When Sun launched its Java group, it put the project in a separate building. And when Nike acquired Hurley, a clothing brand associated with surfing, skateboarding and heavy metal music that was much funkier than the company's more mainstream brand, it kept it as an autonomous entity headquartered in a different city.

However, Stephen Gillett deliberately chose a different strategy when he launched a new division, called Digital Ventures. Its mission, according to Chief Executive Officer Schultz, is to "expand Starbucks' reach in the digital space in a way that is…organizationally nimble, small and focused on creating new revenue streams for the company."[12] Even though this venture represents a substantial departure from the company's core business, Gillett turned down the suggestion that the new group be housed in a remote site because he wanted to "leverage the traditional" by directly linking the new enterprise to the company's existing resources. He recalled Jack Welch's dictum that "there is nothing as satisfying than building something new inside something old."

A middle ground was suggested by Deloitte's Cathy Benko who described starting a new venture in a "Petri dish" environment. The group was "normalized" within the existing organization, but it was positioned explicitly as a "scouting" venture that was exploring a new and untested strategy. This gave the members of the new group permission to take risks while allowing non-members to follow what was going on and give them enough sense of involvement to buy into and support potential successes.

In considering the question "to skunk or not to skunk," Stephen Spear's answer is that "it depends." It made sense for Charles Schwab to start an online banking venture internally since it was consistent with the company's core values. But in the case of Merrill Lynch, its failed online banking initiative might have been successful if it had been more carefully protected from the existing culture that saw it as threatening while it was being incubated.

Toyota's development of the Prius hybrid is another example of the effective use of a skunk works. Toyota understood that it would not be possible to meet the stringent criteria it had set for this new vehicle if they started with an existing platform. Rather, virtually all of the functions of a car would have to be reinvented, a process that would very likely have been torpedoed by company engineers who had spent their entire careers perfecting the conventional form of automobile technology and would therefore have trouble accepting radically different approaches. (For example, the starter motor in most cars just starts the engine; in a Prius, it is also used to help propel the car). Once the Prius' design was complete, Spear noted, the car "came out of the skunk works" and was integrated back into the company's production and sales operations.

When General Motors created its Saturn division, which was an explicit attempt to "reinvent how cars are produced and sold," the company recognized the importance of setting up the venture as a separate company physically located far from the company's main operations in Detroit. But then GM failed to take what it learned from Saturn and incorporate it into the rest of the company. GM also failed to take advantage of what it learned from its NUMMI joint venture with Toyota. According to Spear, GM typically sent single individuals from other plants to the NUMMI plant in California to learn how it operated, then sent them back to their plants to communicate what they had learned. But the secret of the Toyota model that was embodied at NUMMI was about teamwork, and lone individuals could not effectively transfer this learning. It would have required entire teams to learn how to work together, then empower them to move their processes into other parts of the country.

Transplanting a spirit of innovation from the level of a small workgroup to an entire organization can also be a difficult process. According to Cisco's Don Proctor, it is hard to "transfer the joy experienced by a group of 30 people to an organization of 10,000 people." Even when a group grows to 250-300 people, it is hard to scale processes that work in smaller groups.

Cisco has experimented with several different strategies for pursuing new opportunities. One model is the "spin-in" which involves funding a start-up company to develop a new technology or product, then, when it meets certain pre-determined milestones, integrating the external group into the company. While this strategy has worked well, it can be expensive. Cisco has also been experimenting with "internal start-ups" through an Emerging

Technologies Group that was created specifically to identify, develop and launch new businesses within the company. "Virtual start-ups" represent a less formal model that uses a form of crowdsourcing to identify new opportunities across workgroups, rather than within, through "innovation quests." The company is currently pursuing several initiatives in areas like metadata management, service orchestration and business federation that are based on internal quests. Opportunities that are seen to be particularly important—that represent what the company perceives as a major "market adjacency" to existing lines of business—are treated as "big bets" for which the company will deploy significant assets. Recent big bets for Cisco include collaboration, smart grid technology, and connected health care.

Creating a Culture of Experimentation. Traditionally, the role of leadership has been to make decisions and then tell people what to do to carry out those decisions. But, as Scott Cook, Founder and Chair of the Executive Committee of Intuit, noted, the track record of Chief Executive Officers in making the right decisions is not very encouraging. He cited a new history of Hewlett-Packard that argues that one of the reasons for the company's success was its ability over several decades to move in a dramatically new direction every few years, each of which became a major new source of revenue for the company. The company pursued these initiatives in spite of the fact that David Packard was "dead set against" six out of seven of them when they were initially proposed. And the two founders of Google, who were responsible for inventing the company's core search business, were initially opposed to the idea of generating revenue from selling ads connected to search results. Search-related advertising turned out to be the company's second most important innovation and the one that has been responsible for its enormous financial success.

The most useful role of a leader is to "create a culture of experimentation."

Scott Cook

If leaders are not particularly good at making decisions about what a company should do, what is the proper role for a leader? According to Cook, the most useful role of a leader is to "create a culture of experimentation." In virtually every aspect of a firm's business, the best way to find out what works is to run hundreds…or thousands…of experiments. If customers are able to "vote" on what they want, they can tell

a company what works. Without experimentation, it is impossible to know for sure what factors are responsible for success or failure.

Steven Spear added that as the world gets more complex, it is likely that the decisionmaking record of leaders, already bad, will get worse. In fact, the more complex a situation is, the less possible it is for anyone to "design perfection." The only viable option is to set up and run experiments. A majority of these experiments may fail, but some will succeed, and those are the ones that should be supported. Running lots of experiments will increase both profitability and predictability.

Chasing the Rabbit

In *Chasing the Rabbit: How Market Leaders Outdistance the Competition and What Great Companies Can Do to Catch Up and Win* (McGraw-Hill, 2008), Steven Spear describes the characteristics of "high velocity companies" that are consistently able to respond faster and perform better than their competitors. What these companies share is a culture of structured continuous learning that is based on:

1. Empowering all employees to call attention to any problem they find;
2. Responding to these problems by "swarming" people to them until a satisfactory solution is found; and
3. Ensuring that lessons learned from these experiences are quickly and systematically propagated throughout the organization.

Much of the book is devoted to describing how these principles are employed at Toyota, where Spear actually worked for a time. Other case studies in the book include Alcoa, the U.S. Navy's nuclear ship program and several large health care systems.

One of the most impressive stories in the book is about the power of trust and teamwork. It describes how Toyota and its network of suppliers responded to a catastrophic fire at a company that was the sole supplier of a small but vital component in virtually all of the company's vehicles. Despite predictions that this loss would cripple the company's just-in-time production system, a group of Toyota's suppliers, most of whom had no experience producing this kind of part, rapidly banded together to recreate the lost production capacity and began providing the missing component in a matter of a few days.

In fact, businesses must pursue two important, but quite disparate types of activities if they are to remain successful: first, they must *exploit* what they are good at, whether that is flying planes or running an assembly line or providing a cup of coffee. These kinds of predictable activities need to be based on well-established procedures. But companies also need to *explore*, to learn how to do new things in new ways. Maryam Alavi noted that these two alternatives require different types of structures, but, if managed correctly, they need not be in conflict with each other.

John Seely Brown agreed that experimentation is a good thing, but it must be part of a well structured process: first you need to have a thesis and then make a prediction based on that thesis. Once you have the results of an experiment, you need to do a gap analysis to explain the differences between what you predicted and what actually happened. It is also important to keep experiments within limits. If everyone in a company is running experiments, it can confuse customers/partners and increase the difficulty of making a profit. When he was director of Xerox PARC, its funding represented one-third of one percent of the company's revenues. For that amount of money, he was able to "promise that the lab would deliver one surprise each year," which by definition could not be predicted. This amount of uncertainty was acceptable as long as its cost was relatively small and the company maintained a predictable set of core products.
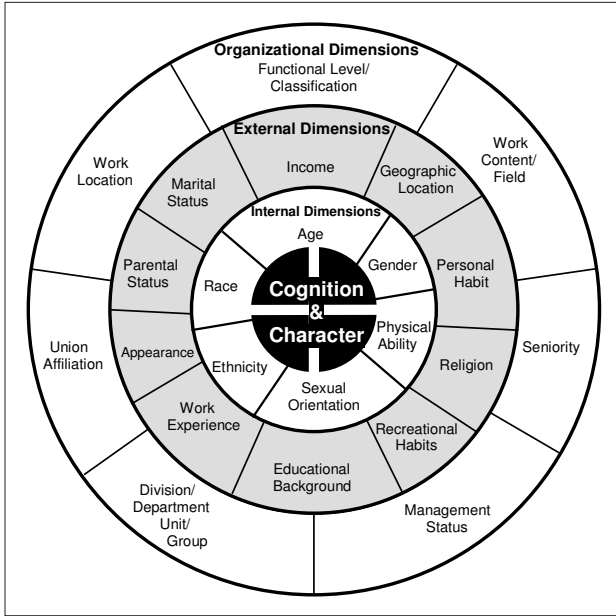
SAP's Mark Yolton concluded that a leader of a 21st century enterprise has three essential roles: first, to establish a set of desired outcomes for the organization; next to create an environment that encourages experimentation to find the best path to those outcomes; and finally, to "define the edges of the sandbox" in order to keep experimentation within manageable bounds.

Moving to the Talent-Driven Firm

When Gary Loveman left Harvard Business School to join Harrah's Entertainment, first as its Chief Operating Officer, then as Chief Executive Officer, he set about to make it the world's largest gaming company. Loveman had definite ideas about how the company's strategy needed to change in order to reach this goal.[13]   Shifting strategic directions meant moving away from what had worked in the past in order to recognize and respond to the challenges of the present moment. A major change in direction requires overcoming some formidable barriers: the weight of tradition and the inertia of existing strategies, the desire to remain with what is comfortable and convenient, and simple personal preferences. Loveman realized that making such a shift would require expanding the company's "cognitive toolbox" by recruiting employees who would bring new perspectives and new skills to the company. According to Fred Keeton, Harrah's Vice President of External Affairs and Chief Diversity Officer, Loveman believed that "the company's collective IQ should increase with every new hire." In other words, Harrah's needed to become a talent-driven organization.

Broadening the diversity of its workforce has been an important goal for Harrah's. But the company has defined "diversity" in a comprehensive way, not merely in terms of compliance with regulatory requirements, as is the case in many companies. As shown below in the "Diversity Wheel," an individual's characteristics can be described in many different ways. Most often associated with "diversity" are innate characteristics such as gender, race, ethnicity or age. People can also be classified by more external dimensions such as their physical appearance, marital or parental status, religion, educational background and work experience. Finally, there are a person's "organizational dimensions" that include factors such as their corporate role, physical location, functional level and their expertise.
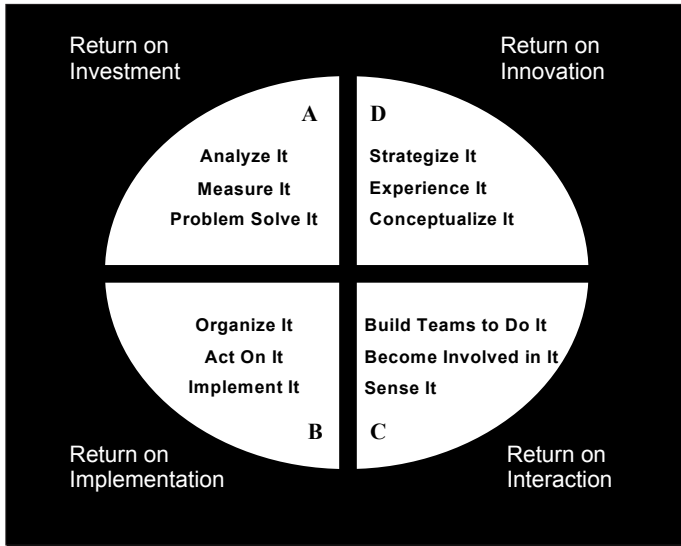
Harrah's Corporate Diversity Wheel

Source: Fred Keeton

But among the most important factors in assessing the diversity of a workforce is the cognitive style and character of individual employees, which are placed at the center of the diversity wheel. To understand this dimension, Harrah's adopted a model of "whole brain leadership" that identifies four separate quadrants, each of which represents a distinctive mode of thinking and acting. Broadly, the two left quadrants represent aspects of the "left brain" that specialize in analysis and implementation, while the two right quadrants reflect characteristics of the "right brain" that are more intuitive and experiential.

Whole Brain Leadership Model

Source: Fred Keeton/Herrmann International

Few people are equally strong in all four quadrants. Using a methodology developed by Herrmann International, it is possible to assess individuals' relative strengths and come up with a profile of their dominant cognitive style. Since all four types of skills are necessary for a successful enterprise, the goal of management should be to create working teams that are "diverse by design" and include people with all of the requisite skills to identify a problem, analyze and find a solution, and then implement that solution. Harrah's now does this on a regular basis to tackle the "hardest problems" that the company faces.

…the goal of management should be to create working teams that are "diverse by design…."

Ensuring the right kind of diversity is a key strategy to optimizing the value of talent to a firm. But, Keeton acknowledged, managing diverse groups well can be difficult, and when it is not done properly, the result is often chaos. Diversity, per se, is neither good nor bad: what gives it value is the ability of leaders to "yield manage diversity" to produce superior

results. And while diversity is a critical success factor for innovation, there are other rules that must be followed in order to sustain an innovative culture. First, everyone must be willing to put their best ideas forward, even if they do not coincide with conventional wisdom. Second, it is vital that the best ideas win, no matter who proposed them. And finally, there needs to be a system in place that can take an idea and turn it into an "actionable, scalable result" as efficiently as possible. When done right, Keeton concluded, a diverse team of 12 people will include "the 13th mind" which is the combined value of active collaboration.

The Role of Leadership. Maintaining the right balance between predictability and innovation is one of the important challenges for a firm's leader. As noted earlier, a key role for the leader of a 21st century firm is to create "a culture of experimentation" in which everyone is able to identify problems and devise solutions for them. But, as Reed Hundt observed, Chief Executive Officers tend to be "hands-on and action-oriented." These are not qualities that seem to be compatible with the concept of a talent-driven firm in which decisionmaking responsibility is widely dispersed.

Scott Cook pointed out that there is, in fact, a variety of style for successful Chief Executive Officers, and the cultures they create tend to reflect their personalities. Companies such as Oracle, Microsoft and Apple have been highly successful under the guidance of strong, charismatic leaders. These companies tend to produce workers who are excellent in their own disciplines but lack broader skills. Cook noted that Seattle VCs report that they can hire many great engineers from Microsoft, but cannot find great general managers there, since managers are expected "to do what Bill or Steve tells them to do." Similarly, at Apple, which is dominated by the genius of Steve Jobs, employees are expected to be the best in the world at their function, but they are not expected to be well-rounded. The question for these strongly hierarchical companies is how well they will fare when this generation of charismatic leaders departs.

A.G. Lafley, who retired as Procter & Gamble's Chief Executive Officer in June 2009, was cited by several Roundtable participants as an example of a leader who focused less on his own decisions and more on how to "set things up so that his people make the right decisions."

P&G's Mattimore noted that Lafley spent the majority of his time "teaching and coaching others," and regarded virtually every interaction as a "teaching moment." This was consistent with the company's emphasis on continuity: managers at P&G are evaluated on how well they help subordinates develop, and succession planning reaches down at least three levels below top management. And since P&G managers tend to have most of their retirement savings in company stock, this also encourages a long-term perspective.

Ann Korologos who has served on the boards of a number of major corporations noted that each Chief Executive Officer she has known has been different, but that all successful CEOs have agendas that are fundamentally about the company they lead and not about themselves. Character and integrity are the most important characteristics for any leader, and it is often a character flaw that results in a leader's downfall. Perhaps the biggest challenge for leaders today is the increased transparency of organizations. In fact, people in an organization—and perhaps outside it as well—may know as much or more about the organization as the CEO. There is no longer any place for leaders to hide.

Leaders also have to cope with continuing change. The strategy that led to success at one point may need to be revised or dropped entirely when conditions change. Fred Keeton noted that Gary Loveman brought about a major revolution in the gaming industry when he introduced the use of rigorous analytics to identify where profits were really being generated. But eventually this approach spread throughout the industry and no longer provides Harrah's with a competitive advantage. As a result, Loveman is now trying to discover "what's next."

Another example of the need to change direction is provided by Cisco's Don Proctor. For many years, the company followed a business model that was based on outside acquisitions. Over a 16-year period, under the leadership of CEO John Chambers, the company carried out 128 mergers and acquisitions, which represented an important source of growth. Identifying, assessing, acquiring and then integrating all of these firms meant that the company's leadership was largely focused on practical operational issues embodied in the "A" and "B" quadrants of the Whole Brain Model. Now, the focus of the company has shifted, and the CEO's role has shifted as well. He now operates more out of the "D" quadrant that involves strategizing, experiencing and conceptualizing new threats and opportunities in order to find and articulate

"a bold vision for the future" for the company. Over the same period of time, Cisco has evolved from a traditional command-and-control structure to one that involves collaborative leadership.

Maryam Alavi added that leadership needs to be seen as a talent that can be distributed throughout an organization, not concentrated just at the top. In fact, every effective worker needs to have leadership abilities, the ability to bring about positive change. These capabilities can be best developed in an environment that encourages everyone to take risks, ask questions, solve problems, and discover what works.

> **…leadership needs to be seen as a talent that can be distributed throughout an organization, not concentrated just at the top.**
>
> *Maryam Alavi*

Public Policies to Support Talent

The final Roundtable session focused on public policies that could support more effective development and use of talented workers by American business. As John Hagel pointed out, we know that digital technologies will continue to evolve and offer new challenges and opportunities for business. But the role of public policy in influencing the impact of these changes is much less certain; it is the "wild card" that can play a positive or negative role in helping businesses to respond to The Big Shift. What is at issue here is not just the country's economic competitiveness. Our national security is also at stake. As Don Proctor put it, "we need the best and brightest to manage the grid"—the infrastructure through which so much of the country's vital life now flows.

Ann Korologos, who served at the U.S. Secretary of Labor from 1987 to 1989, identified several areas of opportunity for policy initiatives. She noted that while the government is not particularly well suited to promoting talent directly, it can create the conditions in which talent can flourish. Given the country's serious economic problems, the first and most urgent task for the federal government is to stabilize the economy and capital markets. Next, the government needs to insure that we have the open, competitive marketplaces that are necessary to support innovation.

Beyond these fundamental tasks, there are a number of areas where government can potentially improve the rules that govern the workplace and the environment in which Americans work. These include:

- Revisiting laws and regulations governing work hours, health and safety requirements, privacy and security to ensure that they reflect the realities of the current marketplace.

- Updating unemployment insurance policies that were designed to cover short-term unemployment but do not generally provide support for training workers for new jobs.

- Reforming immigration laws to ensure that the U.S. continues to attract the most talented workers.

- Making creative use of tax incentives to encourage businesses to "reinvent the 21st century ecosystem."

Education is among the most critical areas for attention by policymakers. It seems obvious that it is not possible to produce workers for the 21st century in schools that evolved in the 19th century or with workforce development programs that were established in the mid-20th century. Yet little has been done on a national level in recent years to update worker training. No Child Left Behind (NCLB) was intended to establish national educational achievement standards, but there are large variations between states in how standards have been developed. Moreover, the NCLB Act may have had the unintended consequence of forcing teachers to "teach to the test" to ensure their students get adequate scores, rather than inculcating a broad range of skills, including helping their students "learn how to learn" throughout their lives.

Education is an area where a lot of experimentation is needed, since no single program will meet everyone's needs. There are a number of promising initiatives being tested around the country that provide potential models for improving the training of new workers and support for current workers. These include:

- *Career readiness certificates.* A number of states have recognized that high school graduation is not necessarily sufficient to qualify for many jobs. More than 30 states are supporting a program that allows individuals to asses their job-related

skills related to reading, applied math and locating and using information. Participants can qualify for certification at four different levels depending on their test scores. (ACT, which administers the test, has profiled thousands of different occupations to identify the skill levels required in each of the three skill categories.)   Since the program was launched in 2004, nearly 300,000 individuals have qualified for the certificates.

• **21st century skills.** Launched in 2002, the Partnership for 21st Century Skills has identified a set of "multidimensional abilities" that students need to succeed in the work world. In addition to traditional core academic subjects, these new abilities include "learning and innovation" skills—creativity, collaboration and communications—as well as skills related to the effective use of new media and technologies. Eleven states have joined the Partnership to integrate this curriculum into their schools.

• **Performance-based rewards for teachers.** Colorado is one of the places that is testing the impact of performance-based rewards for teachers as a tool for improving the quality of education. For example, the Denver Public Schools and the Denver Classroom Teachers Association jointly sponsored a four year pilot focused on developing a direct link between student achievement and teacher compensation. An evaluation found significant benefits, but cautioned that such programs "can be surprisingly difficult to implement properly."[14]

• **Lifelong learning accounts.** Several states, including Maine and Colorado, have introduced the concept of lifelong learning accounts (LiLAs), an idea initially developed by the Council for Adult and Experiential Learning. Under this program, workers contributions to a LiLA are typically matched by funds from participating employers and by the state government. Funds can be used for any type of training, either to improve skills for a current job or to qualify for a new job. The account is "portable" so that workers can keep the funds even if they change jobs. Federal legislation for a national LiLA program has been introduced in Congress, but has not so far been acted on.

2 Million Minutes

Two million minutes is the total amount of time that elapses between graduation from middle school and high school graduation. A documentary film produced by entrepreneur Robert Compton explores what American students are doing with this time compared to their counterparts in places like China and India. The film focuses particularly on the shortcomings of U.S. education in science and math, and points out that half of all college freshmen in this country require remedial work. The original film, along with new documentaries that look in greater detail at high school education in China and India, have been shown in numerous places (including the 2008 Aspen Ideas Festival) in an attempt to spark a debate about how to improve the quality of American education. The message of the film, according to Stephen Gilllett, is that the U.S. is falling farther and farther behind the rest of the world in the education it is providing to the next generations of workers.

The biggest problem with today's public education, according to Reed Hundt, is the huge number of students that do not even graduate from high school. Nationally, only about 70 percent of public high school students graduate on time. And in the country's 50 largest cities, the graduation rate is barely 50 percent. In Detroit, the city with the worst record, just one-quarter of students graduate from high school.[15] What these statistics tell us, according to Hundt, is that youth do not see the rewards of finishing high school.

Conclusion

At the heart of Deloitte's Shift Index is a paradox: despite dramatic improvements in the technological infrastructure that supports business processes, and despite significant increases in worker productivity over the past four decades, the financial performance of American companies has declined broadly over the same period of time. The explanation for this discrepancy, according to John Hagel and John Seely Brown, is the lag that exists between the rapidly changing competitive landscape of business and the speed at which firms have recognized the fundamental changes in the environment and responded

to the challenges and opportunities that it offers. There is considerable irony in the fact that the very characteristics that enabled businesses to flourish for much of the 20th century have now become obstacles to continued success in the 21st century.

In the old, more static environment, success was based on growing firms to the point where they could enjoy the benefits of economies of scale. Under the direction of an enlightened leader who aligned internal forces to move toward a defined goal, companies were able to build up stocks of proprietary knowledge that could be profitably exploited over many years. But in a world of intense global competition and continuous change, that kind of strategy is no longer viable. Today's leaders need to create an organizational structure in which everyone, including customers and partners as well as employees, can respond to challenges as they arise.

…the goal of the 21st century firm must be to figure out how to scale learning.

In a complex and rapidly changing environment, it is increasingly difficult to design and then implement an ideal solution. Rather, leaders need to build a culture of rigorous and disciplined experimentation that makes it possible to solve problems and move steadily toward continued improvement. Such an environment not only makes organizations more agile, what Steven Spear calls "high velocity companies," but also provides an environment that will attract and retain talented workers because it provides them with experiences that allow them—and their firm—to keep getting better faster. Instead of scaling operational efficiencies, the goal of the 21st century firm must be to figure out how to scale learning.

Fortunately, powerful new resources have emerged that make it easier to provide these kinds of experiences. Social networking tools have opened up new possibilities for communication, collaboration and learning across traditional boundaries. And there is a growing number of examples of major companies that have made use of these tools to connect employees with each other and with key external groups to solve tough problems, develop new products, and provide real-time solutions to customers.

Shifting gears to take advantage of these new opportunities is not easy. It requires firms to rethink fundamental assumptions about how they function and deliver value and what their assets really are. It may also require policy changes to provide better support for companies' use of talented workers. But one of the encouraging lessons from this effort to re-conceptualize the way in which business works is that leadership need not be confined to just the top of the corporate pyramid, but can be broadly distributed throughout a company. Becoming a talent-driven firm that maximizes the value of every employee as well as of each of the external communities that it touches is a formidable challenge, especially for companies whose success was built around more traditional lines. Making such a strategic shift may be the best hope of returning corporate America to a more profitable path.

Notes

1. For more about the challenges facing the publishing industry as a result of new technologies, see Richard Adler, *Media and Democracy: A Report of the 2008 Aspen Institute Forum on Communications and Society,* March 2009. Available online at www.aspeninstitute.org/publications/media-democracy-report-2008-aspen-institute-forum-communications-society.

2. John Hagel III, John Seely Brown and Lang Davison, "The Shift Index: Uncovering the Emerging Logic of Deep Change," Deloitte Center for the Edge, June 2009. Available online at www.johnseelybrown.com/shiftindexabstract.pdf.

3. A 2009 study from RAND found that growth in health care costs has had negative effects on employment, output, and value added to GDP in the U.S., and that the effects are greater for industries in which high percentages of workers have employer-sponsored health care insurance. See N. Sood, A. Ghosh, and JJ Escarce, "Employer-Sponsored Insurance, Health Care Cost Growth, and the Economic Performance of U.S. Industries," *HSR: Health Services Research*, June 9, 2009. Available online at www.rand.org/news/press/2009/07/23.

4. Among self-employed persons, 43 percent describe themselves as "passionate" about their work, compared to just 18 percent of those employed by a firm. *The 2009 Shift Index: Measuring the Forces of Long-Term Change.* Deloitte Center for the Edge, 2009, page 72.

5. "Reference Guide on Our Freedom and Responsibility Culture," Netflix. Available online at www.slideshare.net/reed2001/culture-1798664.

6. Larry Huston and Nabil Sakkab, "Connect and Develop: Inside Procter & Gamble's New Model for Innovation," *Harvard Business Review*, March 2006.

7. Jessie Scanlon, "How to Build a Culture of Innovation," *Business Week*, August 19, 2009. Available online at www.businessweek.com/innovate/content/aug2009/id20090819_070601.htm.

8. See, for example, John Seely Brown and Douglas Thomas, "MBAs be Warned: The Gamers Are Learning More Than You Realize," *Wired Magazine*, April 2006.

9. Interview: B2B Online Community Insights from Mark Yolton, SAP Community Network. Available online at http://blogs.business.com/b2b-online-marketing/2009/b2b-online-community-sap.

10. Some of the information about D Street comes from Mary Brandel, "The new employee connection: Social networking behind the firewall," *Computerworld*, August 11, 2008. Available online at www.computerworld.com/s/article/322857/The_new_employee_connection_Social_ networking_behind_the_firewall.

11. See Maryam Alavi and Gerald C. Kane, Social Networks And Information Technology: Evolution and New Frontiers," in D. Leidner, and I. Beccra (eds.), *Knowledge Management: An Evolutionary View of the Field*, AMIS Research Monograph, 2008.

12. Mitch Ratcliffe, "Starbucks Launching Digital Ventures," Rational Rants, March 19, 2009. Available online at http://blogs.zdnet.com/Ratcliffe/?p=382.

13. For a description of Loveman's impact on Harrah's, see Julie Schlosser, "Teacher's Bet," *Fortune* Magazine, March 8, 2004. Available online at http://money.cnn.com/magazines/ fortune/fortune_archive/2004/03/08/363688/index.htm.

14. "Performance-Based Rewards for Teachers," DEST, March 2007. Available online at www. dest.gov.au/sectors/school_education/publications_resources/profiles/performance_based_ rewards_for_teachers.htm.

15. "Cities In Crisis 2009: Closing the Graduation Gap," America's Promise Alliance, 2009. Available online at www.americaspromise.org/Resources/Research-and-Reports/c/Cities-In-Crisis-2009.aspx.

APPENDIX

Leveraging the Talent-Driven Organization in a Time of Economic Crisis

Aspen, Colorado
July 19–July 21, 2009

Roundtable Participants

Richard Adler
Research Affiliate
Institute for the Future

Maryam Alavi
The John M. and Lucy Cook
  Chair in Information Strategy
  and
Vice Dean
Goizueta Business School
Emory University

Cathy Benko
Vice Chairman
  and Chief Talent Officer
Deloitte LLP

John Seely Brown
Independent Co-Chairman
Deloitte Center for
  the Edge

Scott Cook
Founder
  and
Chairman, Executive Committee
Intuit

Ben Edwards
Publisher
  and
Executive Vice-President
Economist.com

Charles M. Firestone
Executive Director
Communications and Society
  Program
The Aspen Institute

Stephen Gillett
Senior Vice President
  and Chief Information Officer
Starbucks

John Hagel
Co-Chairman
Deloitte Center for
  the Edge

Reed E. Hundt
Principal
REH Advisors

Note: Titles and affiliations are as of the date of the conference.

Fred Keeton
Vice President of External Affairs
  and Chief Diversity Officer
Harrah's Entertainment

Ann McLaughlin Korologos
Chairman Emeritus
The Aspen Institute
  and RAND Corporation

Laura Mattimore
Director, Leadership
  Development
Procter & Gamble

Donald R. Proctor
Senior Vice President,
  Software Group
Cisco Systems

Steven Spear
Senior Lecturer
Massachusetts Institute of
  Technology
  and
Senior Fellow
Institute for Healthcare
  Improvement

Dwayne Spradlin
Chief Executive Officer
InnoCentive, Inc.

Vijay K. Thadani
Chief Executive Officer
NIIT Limited

Vivek Wadhwa
Senior Research Associate,
  Labor and Worklife Program
Harvard Law School

Mark Yolton
Senior Vice-President,
  Community Network
SAP

Staff:

Kiahna Williams
Project Manager
Communications and Society
  Program
The Aspen Institute

Note: Titles and affiliations are as of the date of the conference.

About the Author

Richard Adler is a Research Affiliate at the Institute for the Future, Palo Alto. He is also President of People & Technology, a consulting firm located in Silicon Valley.

Richard has written a number of Aspen Institute reports including *Talent Reframed: Moving to the Talent Driven Firm* (2009); *Media and Democracy* (2009); *m-Powering India: Mobile Communications for Inclusive Growth* (2008); *Minds on Fire: Enhancing India's Knowledge Workforce* (2007); and *Next Generation Media: The Global Shift* (2007). He is also the author of *Healthcare Unplugged: The Evolving Role of Wireless Technology* (California HealthCare Foundation, 2007) and is co-editor of *Texting 4 Health* (Stanford Captology Media, 2009).

Richard is Fellow of the World Demographic Association and serves on a number of local and national boards. He holds a BA from Harvard, an MA from the University of California at Berkeley, and an MBA from the McLaren School of Business at the University of San Francisco.

Previous Publications
from the Aspen Institute
Roundtable on Talent Development

Talent Reframed: Moving to the Talent-Driven Firm, by Richard Adler
Talent Reframed: Moving to the Talent-Driven Firm offers new rules for organizations seeking to attain and develop a talented workforce amid a rapidly changing and increasingly globalized business environment. The report, which sets the premise for a new series of Aspen Institute Roundtables on the Talent–Driven Firm, explores how organizations can build talent by relying less on traditional command-and-control structure and more on horizontal collaboration and shared learning. The report, written by Richard Adler, also features a white paper by John Hagel and John Seely Brown.

To purchase books, please contact *publications@aspeninstitute.org.*

About the
Communications and Society Program

www.aspeninstitute.org/c&s

The Communications and Society Program is an active venue for global leaders and experts from a variety of disciplines and backgrounds to exchange and gain new knowledge and insights on the societal impact of advances in digital technology and network communications. The Program also creates a multi-disciplinary space in the communications policy-making world where veteran and emerging decision-makers can explore new concepts, find personal growth and insight, and develop new networks for the betterment of the policy-making process and society.

The Program's projects fall into one or more of three categories: communications and media policy, digital technologies and democratic values, and network technology and social change. Ongoing activities of the Communications and Society Program include annual roundtables on journalism and society (e.g., journalism and national security), communications policy in a converged world (e.g., the future of video regulation), the impact of advances in information technology (e.g., "when push comes to pull"), advances in the mailing medium, and diversity and the media. The Program also convenes the Aspen Institute Forum on Communications and Society, in which chief executive-level leaders of business, government and the non-profit sector examine issues relating to the changing media and technology environment.

Most conferences utilize the signature Aspen Institute seminar format: approximately 25 leaders from a variety of disciplines and perspectives engaged in roundtable dialogue, moderated with the objective of driving the agenda to specific conclusions and recommendations.

Conference reports and other materials are distributed to key policymakers and opinion leaders within the United States and around the world. They are also available to the public at large through the World Wide Web, *www.aspeninstitute.org/c&s*.

The Program's Executive Director is Charles M. Firestone, who has served in that capacity since 1989, and has also served as Executive

Vice President of the Aspen Institute for three years. He is a communications attorney and law professor, formerly director of the UCLA Communications Law Program, first president of the Los Angeles Board of Telecommunications Commissioners, and an appellate attorney for the U.S. Federal Communications Commission.