# Improving workplace performance: historical and theoretical contexts

*The "new" direction in employee participation, workplace technology, and labor force characteristics may be reviving practices that failed to flourish in the past*

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Increasing competition, rapidly changing technology, changing work force characteristics, and how to increase productivity are pressing issues for individual firms and the entire U.S. economic system.

Since the beginning of the industrial revolution, practitioners, researchers, and policymakers have tried to define and evaluate particular workplace practices and systems of practices that can spur productivity growth and competitiveness. The recent emphasis is on initiatives labeled "high-performance practices," "employee involvement," "employee participation," or "flexible work organizations." Generally, these labels refer to situations where firms sharpen the productivity and competitive edge by using the creativity and problem-solving contributions of their employees.

Empirical evidence supporting the claim by proponents of these practices for increased productivity is mixed. Examples of similar approaches in the past can be useful in evaluating these practices today. This article places the current emphasis on "high-performance" workplace practices in a historical context that identifies conditions in the economy that may have prompted recent interest in high-performance workplaces and puts the history of the adoption of different work practices in a theoretical context.

## The workplace practices spectrum

The term "high-performance" describes workplace practices that emphasize the role of employee participation and decisionmaking in an organization. The use of this term, rather than "employee involvement" or "worker participation" presumes that such practices always have a positive effect on productivity. This is not necessarily the case. Similar practices have been experimented with in the past and have been less than uniformly successful in enhancing productivity. The increased interest today suggests that conditions driving economic decisions have changed substantially, or that a new and superior organizational blueprint is now available, or perhaps all of these are the case.

In general, regardless of discipline, theorists and practitioners acknowledge a spectrum of philosophical approaches to the issues of workplace practices. For simplicity, we call the ends of the workplace practices spectrum "traditional" and "alternative," although these designations are vastly simplified characterizations of the range of approaches and philosophies in the wide body of overlapping literature in sociology, psychology, human resource management, and economics. The following key words that are most prominent in the literature helps to identify the spectrum:

| Traditional | Alternative |
|---|---|
| positive | normative |
| rational | values based |
| individual | community/culture |
| mechanistic | environment/organic |
| assumptions and deduction | description and induction |
| scientific | holistic |
| how to resolve conflicting interests | how to determine cooperative solutions |

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The high-performance workplace is usually placed toward the alternative end of the spectrum because of its emphasis on cooperative solutions, general corporate culture, and employee participation in decisionmaking. Although there is no universal agreement about which practices or combinations of practices constitute a high-performance workplace, these workplace practices share some broad principles. High-performance workplaces generally include incentive pay systems (such as profit or gainsharing), flattened-hierarchical decisionmaking (more worker participation in decisions and fewer middle managers), increased emphasis on work force training, increased employment security, and greater flexibility in job definitions and organizational structure.

Employees assist in making decisions essential for innovation, quality improvement, and rapid response to change; as a result, they help ensure the long-term success of the firm. The firm provides workers with the information, skills, voice, incentives, and responsibility needed to make the decisions. In these situations, philosophies essentially change from defining roles and duties of employees to emphasizing flexibility and a more democratic corporate culture.

Other terms, such as "flexible work organizations" and "employee participation" have been used to define workplace practices that often have overlapping or identical elements. Another organizational blueprint, total quality management, is characterized by aspects that fit into both ends of the spectrum: total quality management uses quality circles to give a voice to employees, but usually retains a hierarchical decisionmaking structure. This form of management also implies a set of operational procedures, such as just-in-time inventories that pertain to physical processes rather than employee relations and therefore belongs closer to the traditional end of the spectrum.

The traditional end of the spectrum is epitomized by Frederick Taylor's "scientific management."[1] Today's characterization of scientific management tends to narrowly focus on negative aspects of the era, rather than on Taylor's contribution of establishing a marriage of methods and management. His methods relied on workers motivated by piecework with narrowly and explicitly defined job descriptions designed to improve efficiency.

While prescribing a physical environment that minimized the use of wasted energies, Taylor's methods paid virtually no attention to the human relations environment in which individuals worked. Many current management strategies also fall into the traditional end of the spectrum because they focus more on process than on workers. Operations research, management science, and organizational theory concentrate on the development and application of quantitative techniques to problems of planning and control of the production process, rather than on building a cooperative, participative atmosphere in the workplace.

A high-performance work system is seen as a progressive strategy to improve productivity, but opinions vary regarding the source and distribution of productivity gains that may accrue from this approach. One view of employee involvement claims that employee involvement is part of a transformation of the workplace from traditional hierarchical roles to an idealized "industrial democracy" in which employees, management, and owners benefit from the new work structure. This "win-win" situation is seen as ethically superior because it results in stable, more satisfying jobs for employees and higher productivity for the firm.[2] Some would promote the high-performance work practice solely on the basis of ethical considerations.

A second view holds that employers are the major beneficiaries of employee involvement efforts because these programs usually require voluntary contributions of employee knowledge, a more intensive style of monitoring by peers, or shifting risks to employees without an accompanying return in benefits.[3] In addition, crises such as possible plant closures or increased competition often force a significant change in workplace practices, which help to prevent, destabilize, or eliminate competing coalitions such as unions.[4]

While the ethical considerations and questions concerning distribution of power are important issues, the more immediate concern is whether high-performance work practices live up to their name by improving productivity. To gain a broader perspective on their effectiveness and understand the renewed interest in these work practices, we need to explore the context in which they have been applied in the past.

*Historical review.* Textile mills were the first factories in the United States, replacing home-based production processes during the late 1700's to mid-1800's. With the help of railroads in opening mass markets, the factory system spread into nearly every industry and became the dominant mode of production by the 1880's. In the transformation from the home and crafts-based economy to the industrial manufacturing economy, significant changes occurred in the organization of work. Initially, much of the labor required by firms consisted of skilled artisans who were members of craft unions and could contract their work and conditions. Many of the newly formed factories were merely collections of artisans involved in turning out small amounts of specialized products. The factory system displaced much of the external contracting, or "putting out" system, because the factory was superior for more intensive use of expensive capital and standardization of quality.

As the centralized factory system began to dominate, craftsmen traded independence for access to capital needed to compete with larger manufacturing establishments. In-

stead of controlling its own work efforts, labor now had to comply with work rules and structures that others determined. An important question under these new conditions was how to structure organizations and practices to increase productivity among employees whose interests were different than those of employers.

Attitudes toward labor changed. At one extreme was the view that labor was lazy, insolent, and ignorant; workers had to be prodded through coercion and fear to give a fair day's work. Connected to this idea was a belief that relations between labor and firms would always be based in conflict and, as a result, be adversarial. This view is related to the traditional end of the philosophical spectrum.

The competing alternative extreme was more Jeffersonian. It held that workers would proudly and willingly cooperate in economic progress as long as they were provided with an adequate stake in its survival and had satisfactory living and working conditions. This approach encouraged cooperative solutions to resolve conflicts and promote commitment, loyalty, and harmony.

To assume that the development of working environments since the industrial revolution has been a relatively straightforward progression from the early command, control, and hierarchical drive systems optimized by Taylor's "scientific management" to today's emphasis on "employee involvement" is simplistic and erroneous. Numerous examples of both extremes serve as the foundation of various systems of workplace practices over the past century and a half. Although dominant views have shifted, no single pattern of employment relations can adequately describe the diversity of the American experience.

Sanford Jacoby,[5] Walter Licht[6], Howell John Harris[7], and Steven Barley and Gideon Kunda[8] present histories of workplace practices that have abundant examples of the diversity of strategies employed between 1850 and 1950. Many of the practices now heralded as new are old. Even if particular workplace strategies were not based on an "alternative" philosophical premise, many practices now associated with high-performance, such as self-managing work teams, flexibility in job assignments, performance incentives, external contracting, and a greater concern about company culture, environment and commitment of employees, were evident in the early years of industrialization.

For example, the railroad industry led the way in the late 1800's by founding Young Men's Christian Associations along routes to minister to workers' physical and spiritual needs, hoping to provide a more reliable and stable work force. In the late 1890's, the National Cash Register Co.'s welfare division experimented with building libraries, recreation facilities, and social clubs, and offering classes.

Harris describes how small metalworking firms thrived amid the shift to mass production during the early 20th century by being flexible, relying on skilled labor, and maintaining close ties to competitors and suppliers.[9] Jacoby reported that self-managing work teams, which are now seen as an innovative approach, were evident in the 1870's in the internal contracting method used in such places as the Columbus Iron Works.[10] Groups of workers negotiated with owners for tonnage rates for each job, then decided on pay distribution, whom to hire, and how to organize and train for the job.

Housing projects such as the one built after the Homestead steel strike in 1892 were attempts to provide a stable work force with a direct stake in the company's prosperity, and, to the company's benefit, deter union activity. Most of these efforts were justified as attempts to improve efficiency that would pay for themselves.

Some cases involved not just one or two innovative experiments, but a systematic or philosophical approach to the relationship between workers and their employers. Utopians such as Robert Owen launched the dialogue of social experimentation in the early 1800's by building communities where work was seen as a cooperative venture. Some industrialists, such as George Pullman and N. Nelson built entire communities for their employees.[11]

To attract labor and provide social control in geographically isolated locations, factories also were built around communities designed for their workers.

By 1915, many of the larger firms had created special departments for "welfare work." Staffed by individuals trained in sociology and psychology, they tried to build employee morale and help resolve grievances. According to Licht, businesses established in the mid-1800's in Philadelphia, such as the John B. Stetson Hat Co., the Brown Instrument Co., the Baldwin Locomotive Works, and John Wanamaker's department store, operated extensive programs to minister to employees.[12]

For example, Wanamaker developed programs to "engender diligence and loyalty." He established a store school for young employees and various in-store vocational training programs. He provided paid vacations, the 10-hour day, and the 5-1/2-day workweek. By 1910, Wanamaker's established a medical clinic, savings and loan association, life and pension insurance plans, and numerous employee clubs and teams.[13]

Although many of these efforts were essentially paternalistic and, at best, designed to establish management control, they served as the basis for continued interest in the idea of "industrial betterment" and as experiments in demonstrating conditions to achieve communal order and industrial peace.

The early rhapsodizing about "industrial democracy" was

muted by economic dislocations caused by the financial panic of the early 1890's and the 1896 depression. The firms using alternative methods fared no better than others in their fight for survival. Employers began to seek out the newly ascending industrial engineers and cost accountants to improve the bottom line.

Although management continued to experiment with a variety of practices, the dominant discourse became more traditional: the new approach emphasized rationality and science. To provide fairness to workers and firms, Taylor applied elements of science to objectively determine standards for piece work and job definitions. However, the fear of unemployment allowed the efficiency effort in many cases to overwhelm standards of decency. The "drive" system became a dominant way to motivate workers. Foremen had the power to hire and fire and some believed that arbitrary daily firings kept employees in line and productive. Along with arbitrary work rules, job categories and definitions were often narrowed to improve efficiency. Jobs were designed to give workers little or no discretion in their movements and workers were not expected to use their intellect or judgment in performing work. In these situations, management gave little consideration to the idea that efficient use of labor might involve dimensions other than the job process.

Conflicts spawned by labor unrest and alienation were eventually mediated by New Deal legislation that served as the basis for collective bargaining and adversarial conflict resolution through the 1950's and 1960's. In the last 20 years, collaboration has been emphasized as fewer collective bargaining agreements have been negotiated and the proportion of workers represented by unions has declined. As a result, cooperative practices and corporate culture philosophies that include experiments similar to those of the early transition from a crafts to an industrial based economy are reappearing. In addition, production of customized or specialized products and increased use of external contracting are returning. Indeed, some would argue that we have come full circle in the various stages of labor relations to a return to strategies and approaches that were tried in previous eras but failed to flourish. This "new" direction may be driven by intense forces of competition, new forms of technology, and changing labor force characteristics.

## New economic forces

Debate continues to focus on the nature and extent of current workplace practices and their impact on productivity. However, much also may be learned from examining the conditions behind the current emphasis on high-performance work practices. The assumptions underlying the structure of current industrial relations were formed under very different—and, many would argue, no longer valid—economic conditions.

Employers and employees are now turning their attention to more collaborative types of workplace structures that seek to take advantage of current trends in technology and worker characteristics. The goal is to help companies surpass rivals or at least survive in the intensely competitive and rapidly changing economy. This direction is the reverse of what once occurred: industrialization led to a movement to the city, a high-volume, standardized product, and a labor force that was trained to perform small and repetitive tasks to take advantage of specialization and large economies of scale. Now, according to conventional wisdom, economic forces are returning workers to suburbs, the labor force needs to become more broadly trained, and firms need to readjust to a smaller scale production process. The economic advantages of this change stem from customized products, attention to quality, and highly skilled but not necessarily specialized employees with broad responsibilities.

*Labor costs.* The first important force altering today's workplace is the change in labor costs. Greater competition in international markets with less costly nonunion labor and the low domestic productivity growth of the 1970's and 1980's, has increased the pressure on manufacturers to reduce costs.[14] In addition to increased global competition, the deregulation of many sectors in the 1980's increased the scope of domestic competition. Because labor costs represent approximately 70 percent of all production costs, one obvious target of firms that face escalating competition has been to try to increase labor productivity.[15] Two primary pathways—the "high road" and the "low road"— may achieve this goal. The low road involves attempts to compete that use mass production technologies of the past and slash labor costs. The high road attempts to compete by seeking specialty niches and using highly skilled employees who can react quickly and flexibly to rapidly changing technologies and markets.

*Technological change.* Technology is the second important force that has altered the landscape. Microprocessor-based technologies have cut the cost advantages of mass production and increased the capacity for customization and diversity. As a result, the mass production market of the past has become fragmented and less stable. The volatility of demand and confusion among producers have been compounded by various external shocks, such as the upheavals in the oil markets. These fragmented markets provide the basis for major structural adjustments in what is being produced and the type of production used. Traditional mass production manufacturing (for example, assembly lines) is being replaced by more flexible batch-job high technology manufacturing that competes on the basis of quality and customized service (that computers have made economical) rather than solely on lowest cost.[16]

The new technologies that are being applied often require different types of work structures. Technology used just to make work automatic, mimicking mass production systems, leads to a decline in the number of jobs and skills they require. As a result, worker-management cooperation deteriorates. However, the new computerized technologies used in expanding markets may demand different types of work practices. As described by Shoshana Zuboff, computer information and control systems, often used in continuous/batch processing, require continual responsiveness to a flow of data by workers and management.[17] This has resulted in heightened responsibility, an increased demand for cognitive skills, and closer integration of the tasks of management and workers. Organizations that respond to the new technology by creating a learning environment through management-labor cooperation, integration, and involvement are more successful in using technology to its fullest potential.

Not only is mass production being replaced by flexible production, manufacturing is being replaced by services, and production of goods is being replaced by production of information. The service sector is projected to provide more than half of new job growth while employment in professional specialty occupations, technicians and related areas requiring a high level of training is projected to be the fastest growing sector.[18]

The greater uncertainties associated with the labor, capital, and more fragmented product markets require more dynamic and flexible responses from firms. Observers do not believe that the traditional responses associated with the legacy of New Deal legislation respond sufficiently to compete effectively. These responses are characterized as a reliance on small incremental adjustments, resistance to fundamental modifications, and the use of traditional strategies to maximize efficiency by relying on bureaucratic structures.

*Labor market characteristics.* The third force driving contemporary change is a shift in labor market characteristics. One characteristic most observable is the decline in union membership and bargaining agreements. Unionization has been falling since the mid-1950's when it reached a peak of about 36 percent of the labor force. Its low point was 16.8 percent in 1993.[19] At the same time, the participation rate of women and proportion of white collar and service jobs soared.[20] Regardless of what caused union power to decline, the trend has created an opportunity to fundamentally change the structures and methods of decisionmaking in the firm. Some also argue that the rise of college-educated white-collar workers has raised expectations about job satisfaction and has prompted demands for broader job categories with more flexibility and a bigger voice in decisionmaking.[21]

## Mixed evidence

Some of the historical evidence and current research support the suggestion that current conditions in the economy and the increased emphasis on high-performance workplaces are related. According to Jacoby, personnel management practices were not related in any systematic way to firm or market characteristics in the early years of industrialization.[22] But after the 1920's, the structural shift between declining and expanding industries led to diverse personnel practices that depended to some extent on the economic characteristics of the firm or industry.

Establishments with high, stable profit levels, usually associated with dynamic, new, technologically sophisticated industries such as electrical machines, scientific instruments, and chemicals, were able to finance innovative personnel policies. A similar situation occurred in industries that had a stable demand for their products, such as in public utilities and nondurable manufacturing industries. Stable demand led to stability in employment relations and job safety that helped firms surpass competitors with greater market power but less stability, for example, automakers and steel mills.

Another factor Jacoby cited was ownership patterns. Firms that were tightly controlled or privately owned tended to use more progressive personnel policies than those with a more diversified ownership or control pattern.

More recently, Edward E. Lawler, Gerald Ledford, and Susan A. Mohrman found a strong correlation between employee involvement and firms that face increased international competition and produce products with shorter life cycles.[23] But they did not find a relationship between workplace practices and declining or expanding markets. Paul Osterman found that firms involved in internationally competitive markets, employing technology requiring a high level of skills and adhering to a "high road" strategy that emphasizes product variety and quality over cost reductions, were more likely to use high-performance practices.[24] Participation in international markets exposes firms not only to greater competition, but also to a wider range of industrial relations and forces them to seek the most productive practices.

Unionization is one characteristic that has generated much controversy. While some studies, notably one by Adrienne Eaton and Paula Voos,[25] and another by Mary Ellen Kelley and Bennett Harrison[26] contend that unions enhance employee involvement, the evidence is mixed. Even as the productivity effects of unions remain the subject of debate, the role of unions in the success or failure of high-performance work systems is also unclear.[27]

The evidence concerning the role of a structural shift into services also is mixed. Manufacturing firms have outpaced

service firms in the use of employee involvement techniques, but there is a high degree of variability in both sectors.[28] According to Lawler, Ledford, and Mohrman, some segments of the service sector, such as telecommunications and insurance, have been progressive in the use of employee involvement. But others, such as banking, hotels, restaurants, transportation, and utilities have not.[29] In addition, the gap between the relative incidence in the use of employee involvement between the manufacturing and service sector seems to be widening. The continued growth in the relative size of the service sector, depending on the relative growth in its industries, may affect how quickly and to what extent these alternative work practices are adopted.

## Theoretical perspectives

The different theoretical approaches used to explain how workplace practices formed can be grouped into two main factors: economic and environmental. These reflect the traditional-alternative spectrum noted earlier. Economic factors of competition and cost minimization have been traditionally seen as affecting the viability and profitability of business establishments. Among environmental factors are history, habit, cultural norms, management styles and strategies, and government regulations.

*Economic factors.* The beginning of the 19th century was dominated by classical economists such as Adam Smith, David Ricardo, Thomas Malthus, and John Stuart Mill who focused on economic or "natural" laws that determined the relationships between capital and labor. To this school of thought, labor was one factor of production to be treated in the same manner as land and capital. Traditional economists today also tend to see the changing relationship between labor and management in the context of factors such as competition and market structure.

When a resource is scarce, it obtains a higher price whether the price relates solely to money or includes improved fringe benefits and working conditions. As a result, the greatest advances for labor have occurred in periods of labor shortages, such as World War I and World War II.[30]

Economists use agency theory to model the separation of interests between workers and management within a firm, and concentrate on factors that will affect risks, monitoring, information, and transaction costs between partners in the work agreement. These costs change with new technology and eventually affect the efficacy of vertical or horizontal integration and the effective range of economies of scale. For example, Alfred Chandler suggested that the rise of large bureaucratic firms with differentiated product lines were partly the result of economies of scale that businesses achieved by internalizing transactions.[31]

The argument today focuses on agency costs associated with new microprocessor technology and the impetus it provides for changes in the workplace. For example, when jobs are broadly defined, monitoring costs can be reduced by using self-managing teams rather than more bureaucratic strategies. Traditional economists pay less heed to strategic or philosophical motives for the different development of industrial relations systems and tend to place the emphasis on changing cost structures that create an imperative for management changes. Even when management espouses a particular strategy, such a strategy may arise from an economic necessity rather then an idiosyncratic philosophy of employee relations.[32]

A different view of economic factors may be seen in the radical literature that traces the evolution of the workplace as a continual search by employers to reduce labor costs and control workers. Harry Braverman pioneered the modern version by asserting that management adopted new technology to strip some jobs of skills and give management greater control over the workplace.[33] By reducing each job to simple, repeated actions, output and effort became more consistent, and employees had few opportunities to use their skills or offer their judgment.

In areas requiring higher skill levels, Richard Edwards suggested that technological control is replaced with bureaucratic control that compels workers to offer their loyalty and commitment in exchange for promotion through internal labor markets, seniority, fringe benefits, and compensation policies tied to firm performance.[34] In this view, democratic rhetoric masks the issue of control and broadens the responsibility and output of workers through job enlargements that essentially are work speed-ups.

James Barker [35] and Gideon Kunda [36] suggest that peer pressure is a more pervasive and insidious type of control than the hierarchical tradition promotes.[37] Daniel Bell believes that a salaried professional elite who has the specialized technical knowledge that work now requires is replacing the authority of traditional management.[38] While control theorists may have a limited view of managerial motivations, their descriptions of the consequences for employees often can be a legitimate characterization of the effects of these practices.

A long-wave economic approach by Barley and Kunda interpret this history as rhetorical waves of managerial philosophies that move in repeated cycles.[39] They characterize these cycles as swings between "rational" and "normative" dominant philosophies that correspond to the traditional-alternative spectrum. These shifts in management rhetoric and philosophy are related to five long-wave economic cycles of growth and decline with alternating emphases on individualism (rational) and communalism (normative). During each wave, the productivity gains from labor and capital, and the emphasis of management, shift. As new technology

expands investment in capital, management links productivity to the efficient use of capital rather than labor. At this point, a rational discourse dominates. Normative or alternative approaches to labor take over when the capital matures and profits depend more on the management of labor.

Barley and Kunda contend that the current interest in alternative approaches to labor corresponds with the downturn in productivity in the early 1970's following capital expansion after World War II. This expansion included investments in raw products, such as synthetics and in finished products, such as electronics and air transportation.

*Environmental factors.* This approach, established in the early 1900's, challenged the classical economic view that labor was merely a factor of production similar to land or capital. The early institutionalists Richard T. Ely, Thorstein Veblen, and John R. Commons recognized the conflict of interest between employees and employers but they believed that compromise, negotiation, and accommodation were keys to maintaining a democratic society in a free enterprise economy. Institutional economists, approaching the problem from the alternative end of the spectrum, emphasize the influence of cultural and institutional frameworks on individuals and believe workers have nonmonetary and monetary needs.

This school of thought contends that labor cannot be bought and controlled like other resources; consideration also needs to be given to equity, justice, stability, and other human goals instead of basing decisions solely on a narrow definition of efficiency. The proponents of high-performance workplaces today are essentially descendants of the early institutionalists.

Environmental factors are usually viewed as a complement to, rather than a substitute for, economic forces. Economists and other social scientists believe that these factors also produce a less deterministic and more pluralistic result than that of the traditional economic approach. For example, Jens Christiansen and Peter Philips describe the transition in the early years of the shoe manufacturing industry from a time when work was contracted out to a later era dominated by factories.[40] They found that the transition was driven by efficiency of large scale production but the arrangements were modified significantly by the established distribution of wealth and access to capital, and job discrimination against women in certain aspects of the production process.

Comparative international management studies describe how particular cultural factors help shape different types of employment relations. The relative overt hostility toward unionism in the United States[41] or the historical ties of Japanese firms to customers, suppliers, and government are cited.[42] Peter Senge[43] and David Freedman [44] also have incorporated "chaos theory" to explore how small environmental changes can lead to radical deviations in the behavior of natural or organizational systems, such as human resource management with essentially unpredictable results.

Another environmental approach to the development of industrial relations is "strategic." Thomas Kochan, Harry Katz, and Robert B. McKersie assume that, in similar economic conditions, employers can act rather than react and choose a particular path or strategy in employment policies and relations.[45] As a result, decisions about workplace practices are driven by philosophical considerations rather than changing monitoring, transactions, or information costs. Kochan and Thomas Barocci categorize the history of industrial relations as a system in which the strategic emphasis shifted through several stages.[46]

Initially, the advocates of scientific management believed that by carefully tying incentive wages to employee productivity they could eliminate the conflict of interests between workers and their employers. Later, through World War I and into the 1920's, the emphasis shifted to a system that avoided or co-opted unions by developing internal company-operated programs to improve commitment, loyalty, and performance through increasing employee participation and satisfaction of social needs. From the 1930's through the 1950's, the concerns focused on addressing conflicts of interest through collective bargaining and contract solutions. The emphasis now is on expanding cooperation between unions and management beyond the traditional pay and working conditions to strategic corporate decisionmaking.

A similar but even less deterministic environmental approach uses history and habit to define a view of developments in this area in a particular situation or on an *ad hoc* basis. According to this view, systems maintain themselves through "inertial forces of custom and day-to-day compromises that meet short-term requirements."[47] The emphasis is on historical context and decisions are reactive rather then strategic or philosophical. Licht found little theoretical framework for the variety of personnel policies based on size, technology, form of ownership, or any other standard economic or environmental factors. He concludes that the variety was "notable for the persistence of old forms and old methods."[48]

Some view the current focus on employee participation as an ideological or rhetorical fad that only affects the practices of a few corporations or only the most innovative sectors. Motivated by the need to appear to be "doing something," managers are characterized as embracing each new wave of rhetoric with a flourish of new terminology. Change is promoted for its own sake. Although the new terminology is readily accepted, it is used to give new names to old practices rather than to effectively alter these practices.[49] Supporting this notion is the rather high failure rate of quality

circles and quality of work life programs and unsuccessful alternative work practices of the past 20 years.[50]

Finally, an approach that bridges the economic and environmental factors is developed by David Levine and Laura D'Andrea Tyson.[51] They address the low incidence of high-performance workplaces in terms of environmental factors that create high economic costs, which inhibit the development and success of these practices. They define four conditions that are needed to sustain these practices in a company: group incentive pay; measures to increase group cohesiveness, such as employee participation and narrow wage differentials; guaranteed individual rights; and security and trust that emerge with long-range employment relations. The costs of using these practices in a competitive economy explain why firms will be at a disadvantage in product, labor, and capital markets.

The basic contention is that significant externalities are generated by current conditions, institutions, and practices that prevent firms from engaging in high-performance practices although it would be more broadly economically efficient to do so. Employment security guarantees work against the profitability of firms if they operate in an economy with unstable demand or high unemployment. When profitability or the demand for a product falls, firms may cut costs with layoffs or downsizing. There is a "stabilization feedback benefit"[52] for the economy from firms engaging in a no-layoff policy. Firms generally will find it inefficient to provide employment security under these conditions.

In the labor market, firms that guarantee "just-cause" procedures for dismissal will encounter an adverse selection problem by employees unless there is a universal just-cause procedure: employees with marginal skills and motivation will gravitate to firms where just-cause procedures make dismissals more expensive and less probable. Likewise, a narrow wage differential is unstable as long as other firms are able to bid away more productive employees.

The capital market also creates a disadvantage for firms that invest in training or activities designed to build trust with employees or consumers. These activities have long-term payoffs and high monitoring costs. Short-term accounting procedures cannot deliver an adequate short-term benefit to compete with other investments.

When imperfect information, adverse selection problems, and significant externalities occur in markets, the market mechanism, left to itself, misallocates resources. When these kinds of problems exist to a significant extent, a national policy to alter the institutional framework is often neccessary.

*Additional considerations.* Besides the internal costs of instituting a major transformation of the operating structures in a particular firm, other costs need to be considered when evaluating the viability of high performance workplaces. Related to the possible cost, already mentioned, of burn-out and stress when practices being sold as job enrichment are merely job enlargements[53] is the problem of workers who do not want or are not capable of being involved in decision-making in programs that require a high degree of employee involvement strategies.[54]

If employees who are willing and able to engage in high-performance practices are only the highly skilled and others in less-skilled occupations will not find much improvement in their relationship with employers. An exception would be the extent to which high-performance workplace practices provide positive external effects and reduce the costs of implementing practices as a just-cause procedure in other organizations.

High-performance work practices that are applied poorly and used only to "Taylorize" the workplace under the guise of new cooperative strategies can impose a double cost. A direct loss of productivity may not only result, but opportunities to improve productivity for the firm also will be sacrificed; opportunities also will be lost for firms that hesitate to use practices that appear unsuccessful elsewhere.

A second, macroeconomic, factor must be considered. The shift toward increased organizational flexibility has corresponded to a three-fold increase in the contingent work force since 1982.[55] At the same time, concern is mounting that up to two-thirds of jobs created in 1994 have been in "relatively low-paying sectors such as health care, temporary employment, restaurants, or in the highly volatile construction sector which offers good wages but very little security. By contrast, many industries that offer secure, high-paying jobs are shrinking their payrolls, often by using new technology and new processes to produce more products or services with fewer workers."[56]

Obviously, the contingent work force offers employers a way to reduce labor costs and increase their competitiveness in product markets. It also offers the economy the ability to maintain growth with less pressure on inflation.

Contingent work may provide many employees a chance to balance work with other obligations or interests and perhaps increase the ability of jobless workers to find a job. But it may benefit the remaining core workers at the expense of those in lower paid positions with few, if any, benefits such as health insurance and pension coverage. This, in turn, may lead to a tendency to underinvest in human capital development because employers will not be willing to invest in training, skills development, and education at the same rate they would for core workers.[57] While many advocate more investment in human capital as the solution to low wages and marginal job opportunities, from a macroeconomic perspective, this solution cannot be successful unless the number of high-skilled, well-paying jobs increase correspondingly.

Legitimate concerns also arise from the possibility that the high-performance workplace is the direction of the future and encourages greater disparities between types of jobs available in the economy. Unfortunately, empirical studies tend to concentrate only on quantifiable aspects such as growth and efficiency, and ignore the more complicated issues of equity and justice. We should not limit our perspective to easily quantifiable evidence when inspecting the effects of the high-performance workplace.

## Conclusion

The range of definitions of a high-performance workplace differs among writers and varies according to their academic discipline. Definitions also vary among plants, companies, and even according to countries. The terminology surrounding high-performance work practices is a source of confusion and sometimes cynicism. Some of the cynicism results from the prolific literature by practitioners who often present the material with undying enthusiasm.

The types of practices discussed here are often applied piecemeal or are misapplied and are just as easily discarded when they fail to produce results. The basic impetus for the new attention on high-performance work practices relates to its promise of increased productivity in a rapidly changing economic world. Yet these types of workplace practices have not provided a clearly superior model in the past, in theory in practice.

Whether the implementation of these practices is determined by economic imperatives or is cyclical or random is not known. But these theoretical and historical perspectives provide a rich range of possibilities and perspectives on the use and the future of such systems. The increasingly competitive global economy, rapidly changing technology, and work force characteristics may provide a better environment for these types of practices to take hold, but the economic disincentives for firms trying by themselves to put them in place also need to be recognized.

Although employee involvement and high-performance systems have many enthusiastic promoters, a note of caution also must be sounded regarding the wide use and applicability of these work structures, the failure of earlier experiments to flourish, and the implicit costs of such programs. □

## Footnotes

[1] For an expanded description of scientific management, see Sanford Jacoby, *Employing Bureaucracy: Managers, Unions, and the Transformation of Work in American Industry* (New York, Columbia University Press, 1985); Thomas Robinson, "Revisiting the Original Management Primer: Defending a Great Productivity Innovator," *Industrial Management*, January/February 1992; Stephen Waring, *Taylorism Transformed: Scientific Management Theory Since 1945* (Chapel Hill, University of North Carolina Press, 1991); G.R. Butler, "Frederick Winslow Taylor: The Father of Scientific Management and His Philosophy Revisited," *Industrial Management*, May/June 1991.

[2] See David Levine and Laura D'Andrea Tyson, "Participation, Productivity, and the Firm's Environment," *Paying for Productivity*, Alan Blinder, ed. (Washington, The Brookings Institution, 1991), pp. 183–224; David Levine, *Empowerment to the People: What Business and Government Can Do to Promote High Performance Workplaces*, unpublished manuscript, 1994, 1993; Adrienne E. Eaton and Paula B. Voos, "Union and Contemporary Innovations in Work Organization, Compensation, and Employee Participation," *Unions and Economic Competitiveness*, Lawrence Mishel and Paula B. Voos, eds. (Armonk, NY, M.E. Sharpe, 1992), 175–215; Thomas Kochan, Harry Katz and Robert B. McKersie, *The Transformation of American Industrial Relations* (New York, Basic Books, 1986); Barry Bluestone and Irving Bluestone, *Negotiating the Future: A Labor Perspective on American Business* (New York, Basic Books, 1992); and Eileen Applebaum and Rosemary Batt, *The New American Workplace: Transforming Work Systems in the United States* (Ithaca, NY, ILR Press, 1994).

[3] While both views support many of the individual workplace practices associated with high performance, two important differences are noteworthy. The first concerns on-the-job training. Supporters emphasize that job-specific training will increase job security, but detractors suggest that such training reduces the worker's relative wage in alternative employment. However, a more important difference relates to job security and unions. Supporters view job security and strong unions heightening the success of employee involvement programs, but detractors emphasize the co-optation of the traditional union voice that occurs when unions or employees take a cooperative stance with management. See Robert Drago, "Involving Employees: An Australian Evaluation," unpublished paper, Department of Economics, University of Wisconsin, Milwaukee, 1993.

[4] For example, see Kochan, Katz and McKersie, *The Transformation*; Clair Brown and Michael Reich, "When Does Cooperation Work? A Look at NUMMI and Van Nuys," *California Management Review*, Summer 1989, pp. 26–44.

[5] Sanford Jacoby, *Employing Bureaucracy*; Jacoby, *Masters to Managers: Historical and Comparative Perspectives on American Employers* (New York, Columbia University Press, 1991).

[6] Walter Licht, "Studying Work: Personnel Policies in Philadelphia Firms, 1850–1950," Sanford Jacoby, ed., *Masters to Managers* (New York, Columbia University Press, 1991), p. 57.

[7] John Howell Harris, "Getting It Together: The Metal Manufacturers Association of Philadelphia, c. 1900–1930," in Jacoby, ed., *Masters to Managers*, pp. 111–31.

[8] S. Barley and Gideon Kunda, "Design and Devotion: Surges of Rational and Normative Ideologies of Control in Managerial Discourse," *Administrative Science Quarterly*, September 1992, pp. 363–99.

[9] Harris, "Getting It Together," pp. 111–31.

[10] Jacoby, *Employing Bureaucracy*, p. 15.

[11] Stanley Buder, *Pullman: An Experiment in Industrial Order and Community Planning: 1880–1930* (New York, Oxford University Press, 1967).

[12] Licht, "Studying Work," pp. 43–73.

[13] *Ibid.*, p. 57.

[14] Productivity growth slowed significantly in 1973, from an annual average of 3.71 percent in GDP to 2.2 percent. Labor productivity growth slowed from 2.8 percent in the 1947–73 period to 1.0 percent from 1973 to 1992. Ronald Kutscher, *Historical Trends, 1950–92* and *Current Uncertainties in the American Work Force, 1992–2005*, Bulletin 2452 (Bureau of Labor Statistics, April 1994).

[15] Blinder, *Paying for Productivity*, p. 1.

[16] See Michael J. Piore, "Work, Labour and Action: Work Experience in a System of Flexible Production," *Industrial Districts and Inter-Firm Cooperation in Italy*, F. Pyke, G. Becattini, and W. Sengenberger, eds. (Geneva, International Labour Office, 1990), pp. 52–74; Applebaum and Batt, *New*

*American Workplace*, pp. 6–10.

[17] Shoshana Zuboff, *In the Age of the Smart Machine: The Future of Work and Power* (New York, Basic Books, 1988).

[18] Between 1979 and 1992 the service industry showed a 24.6 percent increase in employment. It is further projected to rise by 33.4 percent during the 1992-2005 period, second only to professional specialties, which are expected to rise by 37.4 percent during the same period. George Silvestri "Occupational Employment: Wide Variations in Growth," *The American Work Force, 1992-2005*, Bulletin 2452 (Bureau of Labor Statistics, April 1994), p. 57.

[19] Bureau of Labor Statistics, USDL 94–58, February 9, 1994.

[20] As a percent of labor force, women represented only 29.6 percent of the labor force in 1950; in 1992 the proportion was 45.5 percent. At the same time, the women's labor force participation rate increased from 33.9 percent to 76.8 percent. Bulletin 2452 (Bureau of Labor Statistics, April 1994).

[21] See Stanley Aronowitz, *False Promises: The Shaping of the American Working Class Consciousness* (New York, McGraw-Hill, 1973), p. 26; and Walter Gershenfeld, "Employee Participation in Firm Decisions," in *Human Resources and the Performance of the Firm*, Morris Kleiner, Richard Block, Myron Roomkin, and Sidney Salsburg, eds. (Madison, WI, Industrial Relations Research Association series, 1987), p. 133.

[22] See Jacoby, *Employing Bureaucracy*.

[23] Edward Lawler, Gerald Ledford, and Susan Mohrman, *Employee Involvement and Total Quality Management: Practice and Results in Fortune 1000 Companies* (San Francisco, Jossey-Bass, 1992).

[24] Paul Osterman, "How Common is Workplace Transformation and How Can We Explain Who Adopts It?" *Industrial and Labor Relations Review*, January 1994, pp. 173–88.

[25] Eaton and Voos, "Union and Contemporary Innovations," pp. 175–215.

[26] Mary Ellen Kelley and Bennett Harrison, "Unions, Technology and Labor-Management Cooperation," Larry Mishel and Paula Voos, eds., *Unions and Economic Competitiveness* (New York, E.M. Sharpe, 1991), pp. 247–86.

[27] Some studies have found that unionization inhibits adoption of progressive human resource policies. D.E. Dimick and V.V. Murray, "Correlates of Substantive Policy Decisions in organizations: The Case of Human Resource Management, *Academy of Management Journal*, December 1978, pp. 611–23; K.B. Clark, "Unionization and Firm Performance," *The American Economic Review*, December 1984, pp. 893–919; R.S. Kaufman and R.T. Kaufman, "Union Effects on Productivity, Personnel Practices, and Survival in the Auto Parts Industry," *Journal of Labor Research*, Fall 1987; and S.E. Jackson, R.S. Schuler and J.C. Rivero, "Organizational Characteristics as Predictors of Personnel Practices," *Personnel Psychology*, Winter 1989; B.E. Becker and Craig Olson, "Unions and Firms Profits," *Industrial Relations*, Fall 1992. Because the direction of causality is questionable, these findings also may be interpreted as evidence that employee involvement strategies work as a deterrent to unionization. Several prominent examples show that unions helped lead the way in establishing new workplace practices. A survey indicated that while the first employee involvement efforts arose in nonunion firms, the 1980's saw the union sector catching up and perhaps pushing beyond the nonunion firms in their use of progressive practices. See W.N. Cooke, "Improving Productivity and Quality Through Collaboration," *Industrial Relations*, Spring 1989, pp. 299–319. A Department of Labor study found that unions do not present a barrier to human resources practices, but they can effectively help shape areas of impact in compensation, testing and evaluation, and other traditional areas of collective bargaining. See John Delaney, David Lewin, and Casey Ichniowski, *Human Resource Policies and Practices in American Firms* (U.S. Department of Labor, Bureau of Labor-Management Relations Report No. 137), 1989.

[28] To the extent that employee involvement has positive effects on attitudes, such programs also may have significant positive effects on customer relations and quality of product in the service sector. Using these methods in services can entail costly selection and training practices, higher labor costs, slower and inconsistent service, and bad decisionmaking. See D. Tansik, "Managing Human Resource Issues for High-Contact Service Personnel," D.E. Bowen, R.B. Chase, T.G. Cummings, and Associates, *Service Management Effectiveness: Balancing Strategy, Organization and Human Resource Operations and Marketing* (San Francisco, Jossey-Bass, 1990), pp. 152–76.

[29] However, banking may be one sector that is more progressive in the use of employee involvement. See M.A. Huselid, "Human Resource Management Practices and Firm Performance," unpublished manuscript.

[30] Many gains labor made during World War II had been made possible earlier by environmental changes, such as passage of the National Industrial Recovery and Wagner acts in the mid-1930's.

[31] Alfred D. Chandler, Jr., Strategy and Structure: Chapters in the History of the American Industrial Enterprise (Cambridge, MA, MIT Press, 1962).

[32] See David Lewin, "Industrial Relations as a Strategic Variable," *Human Resources and the Performance of the Firm*, Morris Kleiner (Madison, WI, University of Madison Press, 1987), pp. 1–43. Brian Becker and Craig Olson, "Labor Relations and Firm Performance," *Human Resources and Firm Performance*, Morris Kleiner, Richard Block, Myron Roomkin, and Sidney Salsburg, eds. (Washington, BNA Press, 1987), pp. 44–86; Daniel Raff, "Ford Welfare Capitalism in its Economic Context in the United States, 1880–1920," in Jacoby, *Masters to Managers* (New York, Columbia University Press, 1991), pp. 90–110.

[33] Harry Braverman, *Labor and Monopoly Capital* (New York, Monthly Review Press, 1974).

[34] Richard Edwards, *Contested Terrain* (New York, Basic Books, 1979).

[35] James Barker, "Tightening the Iron Cage: Concertive Control in Self-Managing Teams," *Administrative Science Quarterly*, September 1993, pp. 408–37.

[36] Gideon Kunda, Engineering Culture: Control and Commitment in a High-Tech Corporation (Philadelphia, PA, Temple University Press), 1992.

[37] A self-managing team and the evolution of peer group monitoring and control were more powerful but less apparent than bureaucratic procedures. This form of control eventually led to burnout, stress, and new sets of rules concerning procedure. "Team members had become their own masters and their own slaves." See James Barker, "Tightening the Iron Cage," p. 433.

[38] Daniel Bell, *Coming of Post-Industrial Society: A Venture in Social Forecasting* (New York, Basic Books), 1973.

[39] Barley and Kunda, "Design and Devotion," pp. 363–99.

[40] Jen Christiansen and Peter Philips, "The Transition from Outwork to Factory Production in the Boot and Shoe Industry, 1830–80," *Masters to Managers*, Jacoby, ed. (New York, Columbia University Press, 1991), pp. 21–42.

[41] See Jacoby, *Masters to Managers*, p. 13.

[42] See Ronald Dore, Taking Japan Seriously: A Confucian Perspective on Leading Economic Issues (Palo Alto, CA, Stanford University Press, 1987) and Chalmers Johnson, *The MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–75* (Palo Alto, CA, Stanford University Press, 1982).

[43] Peter Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York, Doubleday, 1990).

[44] David Freedman, "Is Management Still a Science?" *Harvard Business Review*, November-December 1992, pp. 26–37.

[45] Kochan, Katz and McKersie, *The Transformation of American Industrial Relations*, pp. 9–11.

[46] Kochan and Barocci, *Human Resource Management and Industrial Relations: Text, Readings and Cases* (Boston, Little, Brown and Co., 1985), pp. 7–33.

[47] Jacoby, *Masters to Managers*, p. 13.

[48] Licht, "Studying Work," p. 71.

[49] See Richard Edwards, *Contested Terrain* (New York, Basic Books, 1979), David Brody, "The Rise and Decline of Welfare Capitalism," John Braeman, R.H. Bremner, and David Brody, eds., *Change and Continuity in Twentieth Century America: The 1920's* (Columbus, Ohio State University Press, 1968), pp. 147–78, and Robert G. Eccles, Nitin Nohria, and James Berkley, *Beyond the Hype: Rediscovering the Essence of Management* (Cambridge, MA, Harvard Business School Press, 1992).

[50] Quality of work life failure rates are as high as 75 percent after 5 years. Employee involvement strategies disappear quickly in a downturn without the company's total commitment. See Walter Gershenfeld, "Employee Participation in Firm Decisions," *Human Resources and the Performance of the Firm*, Kleiner, Block, Roomkin, and Salsburg, Industrial Relations series. Gershenfeld reviews research by Charlotte Gold, "Labor-Management Committees: Confrontation, Cooptation or Cooperation," *Key Issues*, No. 28 (Ithaca, NY, ILR Press, 1986). Gold lists six principle reasons for quality of work life failures: lack of job security or layoffs, management resistance or resentment, lack of true union participation, insufficient training, lack of communication or evidence of true commitment, and poor management or low profitability.

In addition, others also include large compensation differentials and special management bonuses, use of formal rather than informal conflict resolution procedures, and failure to integrate process changes with human resource practices. See John Paul MacDuffie and John F. Krafcik, "Integrating Technology and Human Resources for High Performance Manufacturing: Evidence from the International Auto Industry, Cambridge International Motor Vehicle Program (Cambridge, MA, MIT Press, 1990).

One of the biggest barriers to implementing new practices is "short-term performance pressure." See E.E. Lawler III, Ledford and Mohrman *Employee Involvement and Total Quality Management*, 1992, p. 120.

"Quality circle programs have a high death rate, with most programs dying within three years. These failures are directly linked to the lack of power of the participants." See David I. Levine, *Empowerment to the People: What Business and Government Can Do to Promote High-Performance Workplaces*, unpublished manuscript, 1994, p. 48.

[51] Levine and Tyson, "Participation, Productivity, and the Firm's Environment."

[52] By keeping employees on the payroll during slack periods, firms promote macroeconomic stability by helping to stabilize demand for other products that these employees purchase. As a result, other firms reap some benefits of the higher cost no-layoff policy without contributing to the expense this policy incurs. This type of benefit is outside the financial accounting system of the firms and is an externality.

[53] Job design and the distinction between enlarging tasks and knowledge was described in a follow-up study of job enlargement experiments. Enlargement of tasks was associated with less satisfaction, efficiency, customer service and more mental overload with errors. These resulted in net costs rather than benefits. However, knowledge enlargement had net benefits in terms of more satisfaction and customer service and less overload and errors. See M. Campion and C. McClelland, "Follow-up and Extension of Interdisciplinary Costs and Benefits of Enlarged Jobs," *Journal of Applied Psychology*, June 1993.

[54] Increased productivity of a single firm or group of firms may not improve national performance if more productive resources are simply shifted between firms and the productivity of some rises while others fall. One potential problem with high-performance work practices is that they may only increase productivity by screening out certain types of employees. At a TRW factory employing new practices, "voluntary turnover at the plant has been low (about 5 percent) recently although about 40 percent of first-time hires quit their jobs in the first year of the plant's operation. See Kochan, Katz and McKersie, *The Transformation of American Industrial Relations*, 1986. This illustrates another common characteristic of these team concept organizations: only a select group of workers seems to perform well. Although organizations that use these systems are usually very selective in their hiring, they still experience an initial sorting-out process.

[55] The contingent work force is technically composed of part-time workers, self-employed, temporary workers, contract workers, home-based work, and multiple jobholders. One of the fastest growing segments is help supply services, which provides temporary workers to employers for a fee. As a percent of total nonfarm payroll employment, its share tripled between 1982 and 1993, from 0.5 percent to 1.6 percent. In the current economic recovery, total nonfarm payroll employment began rising in February 1992. By the end of 1993, 14 percent of the increase in nonfarm payrolls was in the help supply services industry. But due to limits in data collection, these figures are expected to significantly understate the total number of individuals involved in temporary work. Another major trend in the past two decades has been the significant increase in women who fall into the multiple job-holding category, rising from 16 percent to 44 percent of all multiple job holders. See Thomas Nardone, *"Contingent Workers: Characteristics and Trends,"* manuscript, Office of Employment and Unemployment Statistics (Bureau of Labor Statistics, 1993).

[56] "Much of Rise in Jobs is in Low Paying Sectors," *Washington Post*, May 7, 1994, pp. A1 and A9.

[57] Richard S. Belous, "How human resource systems adjust to the shift toward contingent workers," *Monthly Labor Review*, March 1989, pp. 7–12.