

**Managing Transformational Change:
The Role of Human Resource Professionals**

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HUMAN RESOURCES AND NATIONAL COMPETITIVENESS

Can the United States maintain its traditional position of economic leadership and one of the world's highest standards of living in the face of increasing global competition? Concerned observers cite the following negative news: lagging rates of productivity growth, non-competitive product quality in key industries, structural inflexibilities, and declining real wage levels and flat family earnings (Carnavale, 1991). Further, they offer a plethora of proposed solutions covering both broad public policies and more specific firm-level policies and practices.

The latter often call upon organizations to do a better job of developing and utilizing their human resources (Cyert and Mowery, 1986; Marshall, 1987; Walton, 1987; Dertouzos, Solow, and Lester, 1989). Newly industrializing economies such as Mexico, Brazil, and some of the Asian countries compete in world markets with wages that range from 10 to 30 percent of those paid in more advanced countries such as Japan, Germany, and the U.S. For companies in the more advanced countries to compete in world markets without lowering wages and living standards requires not only ever-increasing levels of productivity, but also finding other sources of competitive advantage such as high product quality, product differentiation, innovation, and speed to market.

But, competing on these grounds often requires major organizational transformations in human resource policies and practices. This is especially the case for U.S. firms that have grown up under the legacy of scientific management and industrial

engineering principles that emphasize the separation of decision-making from doing and narrow divisions of labor and functional specialization. It is also true for unionized firms that have long done business under the New Deal model of labor relations that emphasizes job control unionism and the separation of managerial prerogatives from worker and union rights.

The past decade has witnessed an explosion of interest in human resource management and the growth of a number of new academic journals, professional societies, and industry-university research and educational partnerships. All of these share the view that human resource issues should and, given the increased awareness of their importance, would be elevated to new levels of influence within corporate decision-making and national policy making. In the U.S. these expectations and arguments have been voiced before, in some cases way before (Slichter, 1919; Douglas, 1919). Nonetheless, even today we find that the human resource function within many American corporations remains weak and relatively low in influence relative to other managerial functions such as finance, marketing, and manufacturing (Kochan and Osterman, 1991). Moreover, despite the outpouring of academic writing on "strategic human resource management" little progress has been made in developing systematic theory or empirical evidence on the conditions under which human resources are elevated to a position where the firm sees and treats these issues as a source of competitive advantage. Nor is there much research that actually tests the effects of different strategies on the competitive

position of the firm.

Countless national competitiveness commissions and at least three national commissions sponsored by current or former Secretaries of Labor have documented the need for the country, as well as individual firms, to invest more in human resources and encourage the development of workplace innovations to fully utilize employee talents once developed. But, so far these clarion calls have often fallen on either deaf or hostile ears. Corporate managements, for reasons we will document below, have not proven particularly enthusiastic. Responses from labor leaders have been mixed. Many of the recommended practices have been pioneered in non-union firms and some union leaders see them as inherently anti-union in nature. Yet the economic pressures of the 1980s led to a certain amount of joint union-management experimentation and these experiences have produced a cadre of local and, to a lesser extent, national union leaders who are advocates. As yet, however, no clear vision or strategy on these issues has been articulated by the labor movement. And, finally, there has been virtually no action on the part of national policy makers to create either the environment or the substantive policies needed to encourage or require either firms or unions to act more forcefully in this regard.

Why does the rhetoric so far outstrip the reality? One (although certainly not the only) answer is that theorists and researchers have cast their models of human resource management and related policy issues too narrowly. Specifically, they have relied

too heavily on top management and human resource managers within corporations to drive the necessary transformation. Too little consideration has been given to the organizational and institutional contexts in which firms formulate and implement their human resource strategies and policies. Moreover, the literature has tended to treat each firm as an independent actor whereas, as we argue below, it is now clear that the practices of individual firms are influenced not only by their own business strategies, technologies, and structures, but also by the practices of other firms in their product and labor markets, as well as by the activities of their suppliers and customers, of labor unions, and of public policy-makers (Dyer and Holder, 1988). Thus, we see the need to bring labor and government back into our theories and models of human resource management policy and practice. To do this we need to integrate recent works from human resource management with research from industrial relations, political economy, and internal labor markets. We now turn to this task.

GENERIC PRINCIPLES OF MUTUAL COMMITMENT FIRMS

Many terms have been used to describe firms that seek to treat human resources as a source of competitive advantage and to do so in a manner that preserves high standards of living: "high commitment" (Walton, 1985), "excellent" (Peters and Waterman, 1982), "best practice" (Dertouzos, et al, 1988), "transformed" (Kochan, Katz, and McKersie, 1986), and "high commitment" (Lawler, 1986). We will use the term "mutual commitment" (Walton, 1985). We prefer this term since, as will be evident below, we believe

that achieving and sustaining this approach requires the strong support of multiple stakeholders in an organization and in the broader economy and society in which the organization is embedded.

Figure 1 summarizes a set of generic principles that characterize the "mutual commitment" approach. It is important to realize that these are broad principles which are operationalized in quite different forms across countries and firms. Therefore, they do not translate into a universal set of "best practices", but rather stand as broad guidelines to be implemented in ways that conform to particular cultural or organizational realities. Further, much work remains to be done to (1) test the validity of these principles, (2) describe and analyze the different practices used to meet these principles, and (3) assess the interrelationships among the principles, practices, and important societal, organizational, and individual outcomes in different settings.

Figure 1 about here

Figure 1 organizes the principles according to the three tiered institutional framework presented in Kochan, et al, (1986). At the highest level of the firm, first, it is essential that business strategies not be built around low costs, and especially not around low wages, salaries, and benefit levels, but rather around such sources of competitive advantage as affordable quality, innovation, flexibility, speed, and customer service (Carnavale,

1991). Second, key decision-makers must be guided by a set of values and traditions -- often referred to as organizational culture -- that views employees as valued stakeholders in the organization, not as mere cogs in the machine. Within any given business strategy and strategic context, top managers have significant discretion in human resource matters and values and traditions often dictate how, and how wisely, this discretion is used. Finally, at the strategy and policy-making level it is necessary that there be one or more mechanisms for giving voice to employee and human resource interests in strategy formulation and organizational governance processes. One possibility is the use of planning mechanisms to assure that human resource issues receive just due in the formulation of business strategies (Dyer, 1983; Schuler and Jackson, 1987). In other contexts informal labor-management information sharing and consultation might be used. In still others it might be more formal forms of worker representation in corporate governance structures (e.g., labor leaders on the board of directors, works councils).

Moving down to the human resource policy level we suggest three additional principles that are important for achieving comparative advantage from human resources. First, staffing policies must be designed and managed in such a way that they reinforce the principle of employment security and thus promote the commitment, flexibility, and loyalty of employees. This does not imply guarantees of lifetime employment, but it does imply that the first instinct in good times and bad be to build and protect the

firm's investment in human resources rather than to indiscriminately add and cut people as knee-jerk responses to short-term fluctuations in business conditions (Dyer, Foltman, and Milkovich, 1985). Closely related is the matter of training and development. Clearly, firms that seek competitive advantage through human resources must make the necessary investments to insure that its workforce has the appropriate skills and training not only to meet short-term job requirements, but, also to anticipate changing job requirements over time. That is, they -- and their employees -- must be prepared to adopt the concept of lifelong learning.

The third critical principle at the human resource policy level concerns compensation. Basic compensation levels must be adequate to attract and retain a committed, cooperative, and involved workforce and the compensation structure must be seen as internally equitable by employees at various levels in different functions. Over and above competitive basic compensation levels and structures would be variable, or contingent, compensations schemes (e.g., bonus plans) designed to reinforce desired forms of quality, flexibility, and the like, as well as to provide the firm a means of controlling labor costs in tough times without reverting to layoffs.

Finally, we move to the level of day-to-day interactions of employees with their environment, supervision, and jobs. Here we see several principles as critical. Clearly, in selection high standards must be set regarding the level of skill, training, and

educational preparation required of new recruits. The ability to learn and the willingness to continue to learn over the course of one's career becomes an extremely important personal attribute for employees in mutual commitment firms. Second, the education and skills preparation of employees must be fully utilized on the job. This requires job and career structures that eschew narrow, Tayloristic job assignments in favor of flexible work organization that features expanded jobs and the free-flowing movement of employees across tasks and functional boundaries.

A third principle operant at the work place level deals with opportunities for employees and/or their representatives to engage in problem solving and decision-making in matters which involve their jobs and the conditions surrounding their jobs, what Lawler (1988) refers to as job involvement. The fourth and final workplace principle relates to the quality of relationships between employees, their representatives, and managers. A high conflict/low trust relationship (Fox, 1974) is seen as incompatible with the task of building and maintaining mutual commitment. This does not mean that all conflicts between employees and employers wither away. Indeed we continue to assume that conflicting interests are a natural part of the employment relationship, but that these conflicts cannot be so all-encompassing that they push out the potential for effective problem solving and negotiations. Instead they must be resolved efficiently and in a fashion that maintains the parties' commitment and capacities for pursuing joint gains.

Obviously the above set of principles constitute a caricature of actual organizations. No organization is expected to meet all of these principles perfectly or through the same set of practices. Nonetheless, in the broadest sense it is postulated that when these principles are properly operationalized they will come together in the form an integrated system that, other things equal, will produce globally competitive business results as well as globally competitive standards of living for employees.

The preceding principles were presented as if each firm has total discretion over the choice of its human resource strategies and as if each firm's choice is independent of the strategies followed by other firms. But, neither of these is accurate. External factors, particularly the role of the trade unions, the state (government policy) and, in some countries, industry associations all influence and/or constrain the range of choices open to decision-makers. Moreover, individual firms are heavily influenced by the strategies followed by others in their product and labor markets, supplier and customer networks, and industries. Thus, a critical factor is the rate and depth at which the concepts underlying these principles are diffused across different institutions and institutional decision-makers, as well as across various firms and industries.

EXTENT OF DIFFUSION OF MUTUAL COMMITMENT PRINCIPLES

Unfortunately no single data base currently exists that allows us to estimate precisely how widespread the principles reviewed above are in U.S. organizations today. It is probably fair to say

that very few organizations have yet embraced the full set of principles in a coherent fashion. But, clearly, the past decade has been a time of great experimentation with various of these principles to the point that it is probably fair to say that most large and perhaps even a majority of relatively small firms have experimented with one or more of them at one time or another.

SUPPORTIVE COMPETITIVE STRATEGIES.

We believe that one of the most powerful determinants and reinforcing forces for a mutual commitment human resources strategy lies in the nature of competitive business strategies. Clearly, many U.S. firms recognize this as well. In some ways, however, large U.S. firms suffer from the legacies of their prior successes in taking advantage of the vast size of the U.S. markets. For this reason, they have experienced more difficulty adapting to export markets and the flexible production and differentiated competitive strategies needed to support mutual commitment human resource strategies (Carnavale, 1991; Piore and Sabel, 1984).

In the clothing industry, for example, despite the obvious difficulty of competing with imports from low wage countries, American manufacturers and unions have made only limited progress in abandoning their traditional individual piece-work and related mass production strategies in favor of practices that would give them advantages in time to market and quick response to changing customer preferences (National Clothing Industry Labor Management Committee, 1991). As a result imports are taking a greater share of the market both at the low price points where mass production

continues to dominate and at the high price points where styling, fashion, and variability in tastes matter most.

In the U.S. airline industry, the low cost strategies of Continental and Eastern Airlines served to limit the success of the high growth and service differentiation strategies of firms such as American and Delta Airlines in the first decade following industry deregulation (Kochan and McKersie, 1991). Thus, while low cost strategies are difficult to sustain over the long run, especially when faced with competition from abroad, a significant number of American firms continue to give priority to this strategy and thereby slow the pace of innovations in human resource practices.

MANAGERIAL VALUES AND ORGANIZATIONAL CULTURE.

As noted earlier, we continue to see top executive and line management support as a necessary condition for introducing and sustaining the types of human resource strategies described in Figure 1. Yet, there is little in the history of American management, or in the behavior of American management in the 1980s, to suggest that management alone, left to its own devices, will produce the transformations in organizational practices needed to sustain and diffuse the delineated human resource principles. While some, perhaps even many, top executives share supportive values, they are buffeted by equally strong countervailing pressures that call for quick action taken to bolster the short term interests of major shareholders.

Consider, for example, the following description of the dominant managerial strategies of the 1980s offered by the top

human resource executive at General Electric, one of the firms often cited as symbolizing exemplary management practices (Doyle, 1989):

Economic power in the Eighties--the power to launch and sustain the dynamic processes of restructuring and globalization--has been concentrated especially in the hands of the larger companies, along with the financiers and raiders who alternatively support or attack them. If the Eighties was a new Age of the Entrepreneur--and small business did in fact account for most of the new job creation in the United States--it was Corporate America that accounted for most of the economic disruption and competitive improvement; it took out people, layers and costs while rearranging portfolios and switching industries...Across the decade in the U.S. alone, there was over a trillion dollars of merger and acquisition and LBO activity. Ten million manufacturing jobs were eliminated or shifted to the growing service sector. Deals were cut and alliances forged around America and around the world.

From where the shots were called was well-known. Restructuring and globalization did not emerge from employee suggestion boxes; they erupted from executive suites...

So competitive rigor--imposed by companies in their employer roles and demonstrated by their restructuring and globalizing moves--was widely accepted because its rationale was widely understood. Given this climate--along with a political environment of relative deregulation--companies in the Eighties could focus more on portfolios than on people; fire more than hire; invest more in machines than in skills.

The obvious reality of tough competitive facts inspired fear in employees and gave employers the power to act. Shuttered factories and fired neighbors is restructuring without subtlety: People could see the damage and feel the pain.

This, then, is the perhaps the dominant political environment of corporate decision-making and governance that must be taken into account in building theoretical and action models in the human resource management arena.

HUMAN RESOURCES IN BUSINESS STRATEGY FORMULATION.

Clearly, very few if any inroads have been made into top-level business strategy formulation by either informal or formal forms of employee representation; the European experience remains distinctively European (Kochan, et al, 1986). Some progress has been made in bringing human resource considerations into business strategy sessions through the integration of formal planning processes. Exactly how much progress, however, is difficult to say. Recent surveys suggest that at least some level of integration has been achieved by between 20 and 45 percent of medium-sized and large firms (Burack, 1986; Nkomo, 1986). More intensive case studies support these figures, but call into question the depth of the integration in many cases (Buller, 1988; Craft, 1988). Functionally, some progressive human resource departments are striving to adopt a so-called business partner role, which puts them in a position to interject human resource considerations in ongoing business decision-making (Dyer and Holder, 1988). But, again, while the trend is in the right direction, at this juncture the development is probably neither very widespread nor particularly deep.

EMPLOYMENT SECURITY.

Diffusion of the practices needed to demonstrate a commitment to employment continuity is particularly limited in the U.S. (Dyer, et al, 1985). Massive layoffs became commonplace during the 1980s, affecting not only blue-collar and clerical employees, but also traditionally immune professional and managerial employees as well.

During this time, even firms that had garnered reputations over the years for eschewing layoffs -- Eastman Kodak and Digital Equipment Corporation, for example -- gave up the practice (Foulkes and Whitman, 1985). Many of these firms strove to handle their employment reductions in ways that smoothed the effects on both affected employees and survivors -- by providing severance pay and outplacement services, for example. In general, however, employee cutbacks have been so severe and handled so badly that there appears to be widespread agreement among employers and employees that there has to be a better way. Whether these attitudes eventually translate into a more systematic management of staffing levels and processes, however, remains to be seen.

TRAINING AND DEVELOPMENT.

U.S. firms spend huge sums on training development (some estimates put the number at \$30 - 40 billion per year). Still, in per capita terms the amount spent pales in comparison with the amounts spent by the U.S.'s most formidable international competitors (Kochan and Osterman, 1991). MacDuffie and Kochan (1991), for example, found that U.S. automakers do less training than their Japanese and European counterparts, in part because U.S. work systems demand fewer skills and in part because the U.S. lacks national policies and infrastructures that support or require such firm-level investments.

COMPENSATION.

Current rhetoric clearly supports the use of variable, or contingent, compensation schemes at all levels of employment (such

practices are already reasonably widespread among executives and upper-level managers). Arguments supporting these schemes, however, are as often couched in labor cost terms as in motivational terms which, of course, exposes employees, even relatively low-paid ones, to a downside risk on their earnings, a perspective that is hardly consistent with the philosophy of mutual commitment. At any rate, variable, or contingent, compensation is still another area where rhetoric seems to have outstripped reality by a fairly wide margin. Surveys show that such pay plans, including profit-sharing, gain-sharing, and group incentives, tend to be in effect in no more than one-fifth of medium-sized and large firms (Conference Board, 1990; O'Dell, 1987). Further, many of these plans are experimental, having been instituted only within the last five years, and they often affect only a relatively small numbers of employees.

SELECTION STANDARDS AND FLEXIBLE WORK ORGANIZATIONS.

Some argue that selection standards in U.S. firms are rising in response to technological and work design trends that are upskilling jobs. Others argue (or complain bitterly) that they are lowering in response to shortages of qualified employees. In fact, there probably is some of both going on. Certainly, the desirability of moving to more flexible, and hence more demanding, forms of work organization is a shibboleth among many management writers in the U.S. In practice, however, the legacy of Taylorism and job control unionism (narrow job classifications, tightly circumscribed seniority and wage rules, and carefully guarded

managerial and supervisory prerogatives) serves as a severe constraint on diffusion. Not surprisingly, the most highly visible and widespread use of work teams and other flexible forms of work organization has been found in new or "greenfield" plants that are relatively free from these historical traditions (Walton, 1980). In existing settings, some corporations have used the incentive of capital investments in new products or technology, and thus in job retention, to encourage (or require) local plant managers and, where present, union leaders, to reform their work systems. Chrysler, for example, took this approach in negotiating "Modern Operating Agreements" (MOAs) in six of its facilities in the latter 1980s (Lovell, et al, 1991). Yet, even the Chrysler experience repeats that which Walton (1985) and others have well documented, namely that such experiments seem to have some staying power, but that they generally fail to spread to other units within the firm. As such they become experimental islands in a sea of traditional practices. Interestingly, the use of flexible work systems seems to be gaining faster acceptance among plant managers, local union leaders, and employees than among higher-level managers and national union leaders whose support will clearly be required for diffusion to take hold.

To cite one example, Digital Equipment Corporation recently announced that it planned to close the two plants in its organization that had, by its own account, gone further than any others in committing to and implementing flexible, team based work systems. One of these was a greenfield site specifically designed

as an experimental plant from which others were expected to learn and the other was an existing facility that invested heavily in the changeover and which won a number of awards from Digital management for its "manufacturing excellence". Both fell victim to top management decisions to move production to other facilities in a corporate downsizing move. We dwell on this case not to single out Digital, since in many ways this company has gone further than most others down the path of mutual commitment (Kochan, Osterman, and MacDuffie, 1986). Rather, we use the case simply to illustrate the dependence of many workplace innovations on higher-level corporate decision-making. Ultimately, those within the management structure advocating manufacturing innovations lost the political debate to finance specialists who could demonstrate the logistical savings that would accrue from moving the products produced in these facilities to other locations.

EMPLOYEE PARTICIPATION.

There has probably been more experimentation with employee participation, or involvement, in workplace problem-solving and decision-making than with any other of the mutual commitment principles. A surveys conducted in the mid 1980s showed that more than half of firms with 1,000 or more employees had implemented some version of quality circles or other employee participation programs (Alper, Pfau, and Sirota, 1985). More recent, although less well documented, reports suggest that the pace of experimentation may have quickened since that time. Even friendly observers, however, have noted that many of these participatory

efforts encounter the same sorts of difficulties as do workplace innovations (with which they are, in fact, often linked) thus making them difficult to sustain let alone diffuse (Lawler and Mohrman, 1985; Drago, 1988).

LOW CONFLICT, HIGH TRUST ENVIRONMENT.

Measures of conflict in the workplace are difficult, if not impossible, to come by. But, surveys of employee attitudes, including trust levels, are commonplace. While isolated companies continue privately to report stable (or in some cases even improving) employee attitudes, the overall pattern suggest a general erosion among virtually all employee groups. The decline is particularly sharp in measures of employee trust in management and in their companies generally (Fisher, 1991; Gordon, 1990; Hay Group, 1991; Kanter and Mirvis, 1989). Here there is diffusion; alas, the direction is directly counter to the principles of mutual commitment.

AN ALTERNATIVE CHANGE MODEL AND SOME PROPOSITIONS

Formal models of organizational change are not well developed with respect to human resource management issues. Implicit in the U.S. literature on strategic human resource management, however, are two general propositions. First, that human resource policies and practices need to be matched to firms' competitive business strategies. And second, that change occurs when top executives and/or key line managers take sufficient interest in human resource issues to give them, and their professional human resource staffs, positions of high priority. These propositions reflect a

fundamental weakness of human resource management theories: a myopic viewpoint which fails to look beyond the boundary of the individual firm.

Some years ago we (Kochan and Dyer, 1976) noted the limitations of this view when applied to joint efforts to introduce and manage change in union-management relations. At that time we argued for a change model that recognized the diversity of stakeholder interests and the role of structural bases of power that affect such change efforts. In a similar vein, Kochan and Cappelli (1984), Jacoby (1985), and Baron, Dobbin, and Jennings (1986) have emphasized the importance of external forces--union growth, government policy interventions, tight labor markets and/or crises such as World Wars I and II -- as predictors of innovation in human resource management practice.

Others have emphasized the importance of the politics of corporate decision-making (Pettigrew and Whipp, 1991; Thomas, forthcoming). Support for investment in or consideration of human resource policies is generally sought within broader contests for financial and other resources. The outcomes of these political contests depend heavily on the extent to which advocates can couch their arguments in the prevailing rationales or decision routines used in capital budgeting (e.g. payback periods, rates of return, cost savings, and headcount reductions). This political view can be extended to incorporate broader issues of corporate governance. Doyle's previously quoted description of the U.S. approach to corporate restructuring notes that the speed of adjustment is often

a function of the relative power and pressures exerted by shareholders or of takeover threats. In this view, support for human resource initiatives involves a contest not only among functional units within the firm (e.g., human resources and finance), but also among the interests of employees, shareholders, and other stakeholders.

Purcell (1989) has noted that the trend toward divisional or profit center ("M-Form") organizational structures also serves as a constraint on the elevation of human resources to levels of strategic importance. In these structures human resource decisions tend to be decentralized to the divisional level. This reduces the likely effects of overall corporate value systems and policies, and increases the probability that decision horizons will be short-term.

Two recent international studies reinforce the importance of developing models that extend beyond the boundaries of individual firms. Both Walton (1987) and Cole (1989) stress the importance of national and industry level infrastructures for supporting the diffusion of innovations in human resource practices across national economies. And both cite the lack of such infrastructures as a reason why the U.S. lags in this respect.

Thus, a stronger model of change that considers internal political and external institutional and policy variables is required if we are to understand and effectively promote the diffusion of human resource innovations across the American economy. While we do not pretend to have a well developed and

tested model in hand at this point, we offer the following as key propositions for testing in the interest of developing such a model:

Proposition 1. The capacity of any individual firm to initiate and sustain human resource innovations is constrained by the extent to which these innovations are similarly adapted by other firms in its product and labor markets and customer and supplier networks.

The nub of this proposition is that no firm can transform its human resource practices alone. Human resource innovations are likely to suffer from what is called a "market failures" problem (Levine and Tyson, 1990). That is, while all firms and the macro economy would be better off if all firms invested in human resource innovations, any particular firm will fail to capture the benefits of such investments if others fail to follow suit. This is most clearly seen in the area of investments in training. Leading firms such as Motorola, IBM, Ford, and General Motors that invest a great deal in training and development run the risk of losing these investments to turnover because their employees can attract a wage premium from firms that prefer to skim the labor market. This, in turn, reduces their incentives to invest below the level that would prevail if all firms were developing their own internal labor markets.

The importance of suppliers and customers participating in human resource innovations can clearly be seen in the context of total quality management efforts. Final assemblers can realize the full payoff of such efforts only if their suppliers meet corresponding quality standards. Thus, it is not surprising that

such companies, and particularly Japanese plants operating in the U.S., have demanded that their suppliers develop parallel quality improvement programs in order to become or remain a preferred supplier. Obviously, the reverse logic applies to customers. In one study of auto suppliers, for example, Gillett (1992) found that the extent of innovations in internal management systems varied directly with the expectations of the firms' customers. Change was quickest in coming and most far reaching among those supplying Japanese customers who not only demanded them, but also facilitated their implementation. It was slowest and least extensive among those supplying divisions of American firms that were themselves less committed to similar innovations.

While a number of leading firms are now demanding higher quality from their suppliers, or are being required to provide it to their customers, so far their reach has been rather limited and narrowly focused. The general weakness of industry associations in the U.S., along with the reluctance of firms to intervene in the human resource and labor-management relations affairs of their suppliers and customers, suggests that this avenue of change will have perhaps an important but limited impact. This, however, is a promising avenue for empirical research. It will be interesting to see, for example, if the pressures on suppliers, and of customers, produces a sustained and broad commitment to total quality and whether this will carry over into areas of human resource management that face less direct, market-driven, across-firm pressure.

