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## ***Linking Competitive Strategies with Human Resource Management Practices***

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Over the past several years there has been increased recognition that there is a need to match the characteristics of top managers with the nature of the business. According to Reginald H. Jones, former chairman and CEO of the General Electric Company,

*When we classified. . . [our] . . . businesses, and when we realized that they were going to have quite different missions, we also realized we had to have quite different people running them.<sup>1</sup>*

Within academia there has been similar growing awareness of this need. Although this awareness is being articulated in several ways, one of the most frequent involves the conceptualization and investigation of the relationship between business strategy and the personal characteristics of top managers.<sup>2</sup> Here, particular manager characteristics such as personality, skills, abilities, values, and perspectives are matched with particular types of business strategies. For example, a recently released study conducted by Hay Group Incorporated, in conjunction with the University of Michigan and the Strategic Planning Institute, reports that when a business is pursuing a growth strategy it needs top managers who are likely to abandon the status quo and adapt their strategies and goals to the marketplace. According to the study, insiders are slow to recognize the onset of decline and tend to persevere in strategies that are no longer effective; so, top managers need to be recruited from the outside.

*Recruiting outsiders as a part of strategy has been successful for Stroh Brewing Co., once a small, family-run brewery in Detroit. Some 20% of its senior management team of 25 executives, including President Roger T. Fridholm, have been brought into Stroh since 1978. They've been instrumental in transforming it into the third-largest U.S. brewer.<sup>3</sup>*

The result of such human resource staffing practices has been rather significant:

*Growth companies that staffed 20% of their top three levels with outsiders exceeded their expected return on investment by 10%. Those that relied on inside talent fell short of their goals by 20%. The same holds true for companies in declining industries: companies with outsiders in one out of every five top managements jobs exceeded expected returns by 20%; those with a low proportion of outsiders fell 5% short.<sup>4</sup>*

Outsiders, of course, are not always helpful. When a business is pursuing a mature strategy, what is needed is a stable group of insiders who know the intricacies of the business.

The results of the Hay study suggest that the staffing practices of top management be tied to the nature of the business because different aspects of business demand different behaviors from the individuals running them. The implication, then, is that selecting the right top manager is an important staffing decision.

Another perspective holds that top managers are capable of exhibiting a wide range of behavior, and all that is needed is to match compensation and performance appraisal practices with the nature of the business. Peter Drucker, commenting on the relationship between compensation and a strategy of innovation, observed that:

*I myself made this mistake [thinking that you can truly innovate within the existing operating unit] 30 years ago when I was a consultant on the first major organizational change in American history, the General Electric reorganization of the early 1950s. I*

advised top management, and they accepted it, that the general managers would be responsible for current operations as well as for managing tomorrow. At the same time, we worked out one of the first systematic compensation plans, and the whole idea of paying people on the basis of their performance in the preceding year came out of that.

The result of it was that for ten years General Electric totally lost its capacity to innovate, simply because tomorrow produces costs for ten years and no return. So, the general manager—not only out of concern for himself but also out of concern for his group—postponed spending any money for innovation. It was only when the company dropped this compensation plan and at the same time organized the search for the truly new, not just for improvement outside the existing business, that GE recovered its innovative capacity, and brilliantly. Many companies go after this new and slight today and soon find they have neither.<sup>5</sup>

Similar results illustrating the power of performance appraisal and compensation to affect individual behavior have been reported in the areas of reinforcement, behavior modification, and motivation theories.<sup>6</sup> However, while there has been much written on matching the behavior of top managers with the nature of the business, less attention has been given to the other employees in the organization. Nevertheless, it seemed reasonable to assume that the rest of the workforce would also have to be managed differently, depending on the business. This, then, became our focus of attention.

A critical choice we had to make in our study concerned which aspects of the business we were going to use. Consistent with previous studies, we decided to use the general notion of organizational strategy.<sup>7</sup> On the basis of previous studies that looked at strategy and human resource practices, we decided to adapt Porter's framework of competitive strategy.<sup>8</sup> Using the competitive strategy framework, we developed three archetypes of competitive strategy—PHRM practices combinations. These were derived from the literature, secondary sources, and our previous research. We then examined each of the three archetypes in-depth, using additional secondary data and field results, and addressed issues regarding implementation and revision of the archetypes. All are presented in this article.

First, we shall review the nature and importance

of competitive strategy, and then we shall describe the concept of needed role behavior that enabled us to link competitive strategies and HRM practices.

## Competitive Strategies

Crucial to a firm's growth and prosperity is the ability to gain and retain competitive advantage. One way to do this is through strategic initiative. MacMillan defines "strategic initiative" as the ability to capture control of strategic behavior in the industries in which a firm competes.<sup>9</sup> To the extent one company gains the initiative, competitors are obliged to respond and thereby play a *reactive* rather than *proactive* role. MacMillan argues that firms that gain a strategic advantage control their own destinies. To the extent a firm gains an advantage difficult for competitors to remove, it stays in control longer and therefore should be more effective.

The concept of competitive advantage is described by Porter as the essence of competitive strategy.<sup>10</sup> Emerging from his discussion are three competitive strategies that organizations can use to gain competitive advantage: innovation, quality enhancement, and cost reduction. The *innovation strategy* is used to develop products or services different from those of competitors; the primary focus here is on offering something new and different. Enhancing product and/or service quality is the primary focus of the *quality enhancement strategy*. In the *cost reduction strategy*, firms typically attempt to gain competitive advantage by being the lowest cost producer. Although we shall describe these three competitive strategies as pure types applied to single business units or even single plants or functional areas, some overlap can occur. That is, it is plausible to find business units, plants, or functional areas pursuing two or more competitive strategies simultaneously. This, and how to manage it, are discussed later.

## Competitive Strategy: Needed Role Behaviors

Before developing a linkage between competitive strategy and HRM practices, there must be a *rationale* for that linkage. This rationale gives us a basis for predicting, studying, refining, and modifying both strategy and practices in specific circumstances.

Consistent with previous research, the rationale developed is based on what is needed from employees apart from the specific technical skills, knowledges, and abilities (SKAs) required to perform a specific task.<sup>11</sup> Rather than thinking about task-specific SKAs, then, it is more useful to think about what is needed from an employee who works with other employees in a

*Exhibit 1*  
**Employee Role Behaviors for Competitive Strategies**

1. Highly repetitive, predictable behavior	---- Highly creative, innovative behavior
2. Very short-term focus	---- Very long-term behavior
3. Highly cooperative, interdependent behavior	---- Highly independent, autonomous behavior
4. Very low concern for quality	---- Very high concern for quality
5. Very low concern for quantity	---- Very high concern for quantity
6. Very low risk taking	---- Very high risk taking
7. Very high concern for process	---- Very high concern for results
8. High preference to avoid responsibility	---- High preference to assume responsibility
9. Very inflexible to change	---- Very flexible to change
10. Very comfortable with stability	---- Very tolerant of ambiguity and unpredictability
11. Narrow skill application	---- Broad skill application
12. Low job (firm) involvement	---- High job (firm) involvement

Adapted from R.S. Schuler, "Human Resource Management Practice Choices," in R. S. Schuler, S. A. Youngblood, and V. L. Huber (Eds.) *Readings in Personnel and Human Resource Management*, 3rd Ed., St. Paul, MN: West Publishing, 1988.

social environment.<sup>12</sup> These needed employee behaviors are actually best thought of as needed role behaviors.<sup>13</sup> The importance of roles and their potential dysfunction in organizations, particularly role conflict and ambiguity, is well documented.<sup>14</sup>

Based on an extensive review of the literature and secondary data, several role behaviors are assumed to be instrumental in the implementation of the competitive strategies. Exhibit 1 shows several dimensions along which employees' role behaviors can vary. The dimensions shown are the ones for which there are likely to be major differences across competitive strategies. This can be illustrated by describing the various competitive strategies and their necessary organizational conditions in more detail, along with the needed role behaviors from the employees.

### ***Innovation Strategy and Needed Role Behaviors***

Because the imperative for an organization pursuing an innovation strategy is to be the most unique producer, conditions for innovation must be created. These conditions can be rather varied. They can be created either formally through official corporate policy or more informally. According to Rosabeth Moss Kanter:

*Innovation [and new venture development] may originate as a deliberate and official decision of the highest levels of management or there may be the more-or-less "spontaneous" creation of mid-level people who take the initiative to solve a problem in new ways or to develop a proposal for change. Of course, highly successful companies allow both, and even official top management decisions to undertake a development effort benefit from the spontaneous creativity of those below.<sup>15</sup>*

To encourage as many employees as possible to be innovative, 3M has developed an informal doctrine of allowing employees to "bootleg" 15% of their time on their own projects. A less systematic approach to innovation is encouraging employees to offer suggestions for new and improved ways of doing their own job or manufacturing products.

Overall, then, for firms pursuing a competitive strategy of innovation, the profile of employee role behaviors includes (1) a high degree of creative behavior, (2) a longer-term focus, (3) a relatively high level of cooperative, interdependent behavior, (4) a moderate degree of concern for quality, (5) a moderate concern for

quantity, (6) an equal degree of concern for process and results, (7) a greater degree of risk taking, and (8) a high tolerance of ambiguity and unpredictability.<sup>16</sup>

The implications of pursuing a competitive strategy of innovation for managing people may include selecting highly skilled individuals, giving employees more discretion, using minimal controls, making a greater investment in human resources, providing more resources for experimentation, allowing and even rewarding occasional failure, and appraising performance for its long-run implications. As a consequence of these conditions, pursuing an innovation strategy may result in feelings of enhanced personal control and morale, and thus a greater commitment to self and profession rather than to the employing organization. Nevertheless, benefits may accrue to the firm as well as the employee, as evidenced by the success of such innovative firms as Hewlett-Packard, the Raytheon Corporation, 3M, Johnson & Johnson, and PepsiCo.

Thus, the innovation strategy has significant implications for human resource management. Rather than emphasizing managing people so they work *harder* (cost-reduction strategy) or *smarter* (quality strategy) on the same products or services, the innovation strategy requires people to work *differently*. This, then, is the necessary ingredient.<sup>17</sup>

### **Quality-Enhancement Strategy and Needed Role Behaviors**

At Xerox, CEO David Kearns defines quality as "being right the first time every time." The implications for managing people are significant. According to James Houghton, chairman of Corning Glass Works, his company's "total quality approach" is about people. At Corning, good ideas for product improvement often come from employees, and in order to carry through on their ideas Corning workers form short-lived "corrective action teams" to solve specific problems.

*Employees [also] give their supervisors written "method improvement requests," which differ from ideas tossed into the traditional suggestion box in that they get a prompt formal review so the employees aren't left wondering about their fate. In the company's Erwin Ceramics plant, a maintenance employee suggested substituting one flexible tin mold for an array of fixed molds that shape the wet ceramic product baked into catalytic converters for auto exhausts.<sup>1</sup>*

At Corning, then, quality improvement involves getting employees committed to quality and continual improvement. While policy statements emphasizing the

"total quality approach" are valuable, they are also followed up with specific human resources practices: feedback systems are in place, team work is permitted and facilitated, decision making and responsibility are a part of each employee's job description, and job classifications are flexible.

Quality improvement often means changing the processes of production in ways that require workers to be more involved and more flexible. As jobs change, so must job classification systems. At Brunswick's Mercury Marine division, the number of job classifications was reduced from 126 to 12. This has permitted greater flexibility in the use of production processes and employees. Machine operators have gained greater opportunities to learn new skills. They inspect their own work and do preventive maintenance in addition to running the machines.<sup>19</sup> It is because of human resource practices such as these that employees become committed to the firm and, hence, willing to give more. Not only is the level of quality likely to improve under these conditions, but sheer volume of output is likely to increase as well. For example, in pursuing a competitive strategy involving quality improvement, L.L. Bean's sales have increased tenfold while the number of permanent employees has grown only fivefold.<sup>20</sup>

The profile of employee behaviors necessary for firms pursuing a strategy of quality enhancement is (1) relatively repetitive and predictable behaviors, (2) a more long-term or intermediate focus, (3) a modest amount of cooperative, interdependent behavior, (4) a high concern for quality, (5) a modest concern for quantity of output, (6) high concern for process (*how* the goods or services are made or delivered), (7) low risk-taking activity, and (8) commitment to the goals of the organization.

Because quality enhancement typically involves greater employee commitment and utilization, fewer employees are needed to produce the same level of output. As quality rises, so does demand, yet this demand can be met with proportionately fewer employees than previously. Thanks to automation and a cooperative workforce, Toyota is producing about 3.5 million vehicles a year with 25,000 production workers—about the same number as in 1966 when it was producing one million vehicles. In addition to having more productive workers, fewer are needed to repair the rejects caused by poor quality. This phenomenon has also occurred at Corning Glass, Honda, and L.L. Bean.

### **Cost-Reduction Strategy and Needed Role Behaviors**

Often, the characteristics of a firm pursuing the cost-reduction strategy are tight controls, overhead minimization, and pursuit of economies of scale. The primary focus of these measures is to increase productivity, that is, output cost per person. This can mean a

reduction in the number of employees and/or a reduction in wage levels. Since 1980, the textile industry's labor force decreased by 17%, primary metals, almost 30%, and steel, 40%. The result has been that over the past four years, productivity growth in manufacturing has averaged 4.1% per year, versus 1.2% for the rest of the economy.<sup>21</sup> Similar measures have been taken at Chrysler and Ford and now are being proposed at GM and AT&T. Reflecting on these trends, Federal Reserve Governor Wayne D. Angell states, "We are invigorating the manufacturing sector. The period of adjustment has made us more competitive."<sup>22</sup>

In addition to reducing the number of employees, firms are also reducing wage levels. For example, in the household appliance industry where GE, Whirlpool, Electrolux, and Maytag account for 80% of all production, labor costs have been cut by shifting plants from states where labor is expensive to less costly sites. The result of this is that a new breed of cost-effective firms are putting U.S. manufacturing back on the road to profitability.<sup>23</sup>

Cost reduction can also be pursued through increased use of part-time employees, subcontractors, work simplification and measurement procedures, automation, work rule changes, and job assignment flexibility. Thus, there are several methods for reducing costs. Although the details are vastly different, they all share the goal of reducing output cost per employee.

In summary, the profile of employee role behaviors necessary for firms seeking to gain competitive advantage by pursuing the competitive strategy of cost reduction is as follows: (1) relatively repetitive and predictable behaviors, (2) a rather short-term focus, (3) primarily autonomous or individual activity, (4) modest concern for quality, (5) high concern for quantity of output (goods or services), (6) primary concern for results, (7) low risk-taking activity, and (8) a relatively high degree of comfort with stability.

Given these competitive strategies and the needed role behaviors, what HRM practices need to be linked with each of the three strategies?

## ***Typology of HRM Practices***

When deciding what human resource practices to use to link with competitive strategy, organizations can choose from six human resource practice "menus." Each of the six menus concerns a different aspect of human resource management. These aspects are planning, staffing, appraising, compensating, and training and development.

A summary of these menus is shown in Exhibit 2. Notice that each of the choices runs along a continuum. Most of the options are self-explanatory, but a run-down of the staffing menu will illustrate how the

process works. A more detailed description of all menus is provided elsewhere.<sup>24</sup>

## ***Recruitment***

In each of these areas, a business unit (or a plant) must make a number of decisions; the first choice involving where to recruit employees. Companies can rely on the internal labor market, e.g., other departments in the firm and other levels in the organizational hierarchy, or they can rely on the external labor market exclusively. Although this decision may not be significant for entry-level jobs, it is very important for most other jobs. Recruiting internally essentially means a policy of promotion from within. While this policy can serve as an effective reward, it commits a firm to providing training and career development opportunities if the promoted employees are to perform well.

## ***Career Paths***

Here, the company must decide whether to establish broad or narrow career paths for its employees. The broader the paths, the greater the opportunity for employees to acquire skills that are relevant to many functional areas and to gain exposure and visibility within the firm. Either a broad or a narrow career path may enhance an employee's acquisition of skills and opportunities for promotion, but the time frame is likely to be much longer for broad skill acquisition than for the acquisition of a more limited skill base. Although promotion may be quicker under a policy of narrow career paths, an employee's career opportunities may be more limited over the long run.

## ***Promotions***

Another staffing decision to be made is whether to establish one or several promotion ladders. Establishing several ladders enlarges the opportunities for employees to be promoted and yet stay within a given technical specialty without having to assume managerial responsibilities. Establishing just one promotion ladder enhances the relative value of a promotion and increases the competition for it.

Part and parcel of a promotion system are the criteria used in deciding who to promote. The criteria can vary from the very explicit to the very implicit. The more explicit the criteria, the less adaptable the promotion system is to exceptions and changing circumstances. What the firm loses in flexibility, the employee may gain in clarity. This clarity, however, may benefit only those who fulfill the criteria exactly. On the other hand, the more implicit the criteria, the greater the flexibility to move employees around to develop them more broadly.

Exhibit 2

**Human Resource Management Practice Menus**

**Planning Choices**

Informal	-----	Formal
Short Term	-----	Long Term
Explicit Job Analysis	-----	Implicit Job Analysis
Job Simplification	-----	Job Enrichment
Low Employee Involvement	-----	High Employee Involvement

**Staffing Choices**

Internal Sources	-----	External Sources
Narrow Paths	-----	Broad Paths
Single Ladder	-----	Multiple Ladders
Explicit Criteria	-----	Implicit Criteria
Limited Socialization	-----	Extensive Socialization
Closed Procedures	-----	Open Procedures

**Appraising Choices**

Behavioral Criteria	-----	Results Criteria
Purposes: Development, Remedial, Maintenance		
Low Employee Participation	-----	High Employee Participation
Short-Term Criteria	-----	Long-Term Criteria
Individual Criteria	-----	Group Criteria

**Compensating Choices**

Low Base Salaries	-----	High Base Salaries
Internal Equity	-----	External Equity
Few Perks	-----	Many Perks
Standard, Fixed Package	-----	Flexible Package
Low Participation	-----	High Participation
No Incentives	-----	Many Incentives
Short-Term Incentives	-----	Long-Term Incentives
No Employment Security	-----	High Employment Security
Hierarchical	-----	High Participation

**Training and Development**

Short Term	-----	Long Term
Narrow Application	-----	Broad Application
Productivity Emphasis	-----	Quality of Work Life Emphasis
Spontaneous, Unplanned	-----	Planned, Systematic
Individual Orientation	-----	Group Orientation
Low Participation	-----	High Participation

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**Socialization**

After an employee is hired or promoted, he or she is next socialized. With minimal socialization, firms convey few informal rules and establish new procedures to immerse employees in the culture and practices of the organization. Although it is probably easier and cheaper to do this than to provide maximum socialization, the result is likely to be a more restricted

psychological attachment and commitment by the employee to the firm, and perhaps less predictable behavior from the employee.

**Openness**

A final choice to be made in the staffing menu is the degree of openness in the staffing procedures. The more open the procedures, the more likely there is to

be job posting for internal recruitment and self-nomination for promotion. To facilitate a policy of openness, firms need to make the relevant information available to employees. Such a policy is worthwhile; since it allows employees to select themselves into jobs, it is a critical aspect of attaining successful job-person fit. The more secret the procedures, the more limited the involvement of employees in selection decisions, but the faster the decision can be made.

A key aspect of the choices within the staffing activity or any other HRM activity is that different choices stimulate and reinforce different role behaviors. Because these have been described in detail elsewhere, their impact is summarized below.

### ***Hypotheses of Competitive Strategy-HRM Archetypes***

Based on the above descriptions of competitive strategies and the role behaviors necessary for each, and the brief typology of HRM practices, we offer three summary hypotheses.

#### ***Innovation Strategy***

Firms pursuing the innovation strategy are likely to have the following characteristics: (1) jobs that require close interaction and coordination among groups of individuals, (2) performance appraisals that are more likely to reflect longer-term and group-based achievements, (3) jobs that allow employees to develop skills that can be used in other positions in the firm, (4) compensation systems that emphasize internal equity rather than external or market-based equity, (5) pay rates that tend to be low, but that allow employees to be stockholders and have more freedom to choose the mix of components (salary, bonus, stock options) that make up their pay package, and (6) broad career paths to reinforce the development of a broad range of skills. These practices facilitate cooperative, interdependent behavior that is oriented toward the longer term, and foster exchange of ideas and risk taking.<sup>25</sup>

#### ***Quality-Enhancement Strategy***

In an attempt to gain competitive advantage through the quality-enhancement strategy, the key HRM practices include (1) relatively fixed and explicit job descriptions, (2) high levels of employee participation in decisions relevant to immediate work conditions and the job itself, (3) a mix of individual and group criteria for performance appraisal that is mostly short-term and results-oriented, (4) relatively egalitarian treatment of employees and some guarantees of employment security, and (5) extensive and continuous

training and development of employees. These practices facilitate quality enhancement by helping to ensure highly reliable behavior from individuals who can identify with the goals of the organization and, when necessary, be flexible and adaptable to new job assignments and technological change.<sup>26</sup>

### ***Cost-Reduction Strategy***

In attempting to gain competitive advantage by pursuing a strategy of cost reduction, key human resource practice choices include (1) relatively fixed (stable) and explicit job descriptions that allow little room for ambiguity, (2) narrowly designed jobs and narrowly defined career paths that encourage specialization, expertise, and efficiency, (3) short-term, results-oriented performance appraisals, (4) close monitoring of market pay levels for use in making compensation decisions, and (5) minimal levels of employee training and development. These practices maximize efficiency by providing means for management to monitor and control closely the activities of employees.

### ***An Innovative Strategy: One Company's Experience***

Frost, Inc., is one company that has made a conscious effort to match competitive strategy with human resource management practices. Located in Grand Rapids, Michigan, Frost is a manufacturer of overhead conveyor trolleys used primarily in the auto industry, with sales of \$20 million.<sup>28</sup> Concerned about depending too heavily on one cyclical industry, President Charles D. "Chad" Frost made several attempts to diversify the business, first into manufacturing lawn mower components and later into material-handling systems, such as floor conveyors and hoists. These attempts failed. The engineers didn't know how to design unfamiliar components, production people didn't know how to make them, and sales people didn't know how to sell them. Chad Frost diagnosed the problem as inflexibility. "We had single-purpose machines and single-purpose people," he said, "including single-purpose managers."

Frost decided that automating production was the key to flexibility. Twenty-six old-fashioned screw machines on the factory floor were replaced with 11 numerical-controlled machines paired within 18 industrial robots. Frost decided to design and build an automated storage-and-retrieval inventory control system, which would later be sold as a proprietary product, and to automate completely the front office to reduce indirect labor costs. The new program was formally launched in late 1983.

What at first glance appeared to be a hardware-oriented strategy turned out to be an exercise in

human resource management. "If you're going to reap a real benefit in renovating a small to medium-size company, the machinery is just one part, perhaps the easiest part, of the renovation process," says Robert McIntyre, head of Amprotech, Inc., an affiliated consulting company Frost formed early in the automation project to provide an objective, "outside" view. "The hardest part is getting people to change."

Frost was clearly embarking on a strategy of innovation. As it turns out, many of the choices the company made about human resource practices were intended to support the employee role behaviors identified as being crucial to the success of an innovation strategy.

For example, the company immediately set out to increase employee identification with the company by giving each worker 10 shares of the closely held company and by referring to them henceforth as "shareholder-employees." The share ownership, which employees can increase by making additional purchases through a 401(d) plan, are also intended to give employees a long-term focus, which is another behavior important for an innovation strategy to succeed. Additional long-term incentives consist of a standard corporate profit-sharing plan and a discretionary profit-sharing plan administered by Chad Frost.

Frost's compensation package was also restructured to strike a balance between results (productivity) and process (manufacturing). In Frost's case, the latter is a significant consideration, since the production process is at the heart of the company's innovation strategy. Frost instituted a quarterly bonus that is based on companywide productivity, and established a "celebration fund" that managers can tap at their discretion to reward significant employee contributions. The bonuses serve to foster other needed employee role behaviors. By making the quarterly bonus dependent on companywide productivity, the company is encouraging cooperative, interdependent behavior. The "celebration fund" meanwhile, can be used to reward and reinforce innovative behavior. (Even the form of the celebration can be creative. Rewards can range from dinner with Chad Frost to a weekend for an employee and spouse at a local hotel, to a belly dancing performance in the office.)

Frost encourages cooperative behavior in a number of other ways as well. Most offices (including Chad Frost's) lack doors, which is intended to foster openness of communication. Most executive perks have been eliminated, and all employees have access to the company's mainframe computer (with the exception of payroll information) by way of more than 40 terminals scattered around the front office and factory floor.

In our view, a vital component of any innovation strategy is getting employees to broaden their skills, assume more responsibilities, and take risks. Frost encourages employees to learn new skills by paying for extensive training programs, both at the company and

at local colleges. It even goes further, identifying the development of additional skills as a prerequisite for advancement. This is partly out of necessity, since Frost has compressed its 11 previous levels of hierarchy into four. Because this has made it harder to reward employees through traditional methods of promotion, employees are challenged to advance by adding skills, assuming more responsibilities, and taking risks.

### *Honda's Quality-Enhancement Strategy*

We can identify those human resource practices that facilitate product quality by examining Honda of America's Marysville, Ohio plant.<sup>29</sup> With a current workforce of approximately 4,500, this plant produces cars of quality comparable to those produced by Honda plants in Japan. Although pay rates (independent of bonuses) may be as much as 30-40% lower than rates at other Midwest auto plants, Honda has fewer layoffs and lower inventory rates of new cars than its competitors. How is this possible?

One possible explanation is that Honda knows that the delivery of quality products depends on predictable and reliable behavior from its employees. In the initial employee orientation session, which may last between 3 and 4 hours, job security is emphasized. Employees' spouses are encouraged to attend these sessions, because Honda believes that spouse awareness of the company and its demands on employees can help minimize absenteeism, tardiness, and turnover. Of course, something so critical to quality as reliable behavior is not stimulated and reinforced by only one human resource practice. For example, associates who have perfect attendance for four straight weeks receive a bonus of \$56. Attendance also influences the size of the semiannual bonus (typically paid in spring and autumn). Impressive attendance figures also enhance an employee's chances for promotion. (Honda of America has a policy of promotion from within.)

In addition to getting and reinforcing reliable and predictable behavior, Honda's HRM practices encourage a longer-term employee orientation and a flexibility to change. Employment security, along with constant informal and formal training programs, facilitate these role behaviors. Training programs are tailored to the needs of the associates (employees) through the formal performance appraisal process, which is developmental rather than evaluational. Team leaders (not supervisors) are trained in spotting and removing performance deficiencies as they occur. To help speed communication and remove any organizational sources of performance deficiencies, the structure of the organization is such that there are only four levels between associates and the plant manager.

At Honda, cooperative, interdependent behavior is fostered by egalitarian HRM practices. All associates wear identical uniforms with their first names em-

bossed; parking spaces are unmarked, and there is only one cafeteria. All entry-level associates receive the same rate of pay except for a 60-cents-an-hour shift differential. The modern health center adjacent to the main plant is open to all. These practices, in turn, encourage all associates to regard themselves collectively as "us" rather than "us" versus "them." Without this underlying attitude, the flexible work rules, air-conditioned plant, and automation wouldn't be enough to sustain associate commitment and identification with the organization's goal of high quality.

The success of Honda's quality enhancement strategy goes beyond concern for its own HRM practices. It is also concerned with the human resource practices of other organizations, such as its suppliers. For example, Delco-Remy's practice of participative management style, as well as its reputation for producing quality products at competitive prices, was the reason why Delco was selected by Honda as its sole supplier of batteries.<sup>30</sup>

### ***A Cost-Reduction Strategy at United Parcel Service***

Through meticulous human engineering and close scrutiny of its 152,000 employees, United Parcel Service (UPS) has grown highly profitable despite stiff competition. According to Larry P. Breakiron, the company's senior vice-president of engineering, "Our ability to manage labor and hold it accountable is the key to success."<sup>31</sup> In other words, in an industry where "a package is a package," UPS succeeds by its cost-reduction strategy.

Of all paths that can be taken to pursue a cost-reduction strategy, the one taken by UPS is the work standard/simplification method. This method has been the key to gains in efficiency and productivity increases. UPS's founder, James E. Casey, put a premium on efficiency. In the 1920s, Casey hired pioneers of time and motion study such as Frank Gilbreth and Fredrick Taylor to measure the time each UPS driver spent each day on specific tasks. UPS engineers cut away the sides of UPS trucks to study how the drivers performed, and then made changes in techniques to enhance worker effectiveness. The establishment of effective work standards has led not only to enormous gains in efficiency and cost reduction; it actually makes employees less tired at the end of the day. During the day, the employees engage in short-term, highly repetitive role behaviors that involve little risk taking. Because specialists identify the best way to accomplish tasks, employee participation in job decisions is unnecessary.

Through the use of time and motion studies, UPS has established very specific ways for workers to perform their jobs. The company also monitors closely the

performance of the workers. More than 1,000 industrial engineers use time and motion study to set standards for a variety of closely supervised tasks. In return, the UPS drivers, all of whom are Teamsters, earn approximately \$15 per hour—a dollar or so more than the drivers at other companies. In addition, employees who perform at acceptable levels enjoy job security.

### ***Implementation Issues***

These descriptions of Frost, Honda, and UPS illustrate how a few organizations systematically match their HRM practices not only with their articulated competitive strategies, but also with their perceptions of needed role behavior from their employees. Although only a beginning, the success of these firms suggests that HRM practices for all levels of employees are affected by strategic considerations. Thus, while it may be important to match the characteristics of top management with the strategy of the organization, it may be as important to do this for *all* employees.

Although the results of these examples generally support the three major hypotheses, they also raise several central issues: Which competitive strategy is best? Is it best to have one competitive strategy or several? What are the implications of a change of competitive strategy?

### ***Which Competitive Strategy Is Best?***

Of the three competitive strategies described here, deciding which is best depends on several factors. Certainly customer wants and the nature of the competition are key factors. If customers are demanding quality, a cost-reduction strategy may not be as fruitful as a quality improvement strategy. At the Mercury Marine division of Brunswick and at Corning Glass Works, the issues seem to be quality. According to McComas, "Customers, particularly industrial trial buyers, would have been no more inclined to buy their products even if the manufacturer could have passed along savings of, say, 10% or even 20%."<sup>32</sup>

If, however, the product or service is relatively undifferentiated, such as the overnight parcel delivery industry, a cost-reduction strategy may be the best way to gain competitive advantage. Even here, though, there is a choice. United Parcel Service, for example, is pursuing the cost-reduction strategy through work process refinements such as work clarification, standardization, measurement, and feedback. Roadway, in contrast, pursues the same strategy by combining employee independence and ownership (drivers own their own trucks, of various colors; UPS drivers do not own their brown trucks) with as much automation as possible.<sup>33</sup> The advantage of these latter approaches to cost reduction, compared with such approaches as wage

concessions or workforce reductions, is the amount of time required to implement them. Cost reduction through wage concessions or employee reductions, though painful, can be relatively straightforward to implement. As a consequence, it can be duplicated by others, essentially eliminating the competitive advantage gained by being able to offer lower prices. The adoption of two-tiered wage contracts within the airline industry is a good example: Soon after American Airlines installed a two-tier wage system for its pilots, Eastern, United, and Frontier Airlines negotiated similar contracts with their employees.

There may, however, be some external conditions that might permit the success of a strategy of cost reduction to last. After four straight years of losses and a shrinkage in the number of stores from nearly 3,500 in 1974 to a little more than 1,000 in 1982, the Great Atlantic & Pacific Tea Company (A&P) and the United Food and Commercial Workers (UFCW) saw the handwriting on the wall: Either reduce costs and be competitive, or go out of business. According to a *Business Week* article,

*In an experimental arrangement negotiated with the . . . UFCW at 60 stores in the Philadelphia area, workers took a 25% pay cut in exchange for an unusual promise: If a store's employees could keep labor costs at 10% of sales—by working more efficiently or by boosting store traffic—they'd get a cash bonus equal to 1% of the store's sales. They'd get a 0.5% bonus at 11% of sales or 1.5% at 9.5% of sales. It was a gamble in the low-margin supermarket business, but it worked.<sup>34</sup>*

The result? An 81% increase in operating profits in 1984 and a doubling of A&P's stock price. Although the UFCW agreed with the incentive compensation scheme at A&P, the union appears unwilling to see this practice spread. Consequently, competitors of A&P, such as Giant Food Inc., would have difficulty implementing the same scheme.<sup>35</sup>

By contrast, a quality improvement strategy, whether by automation or quality teams, is more time consuming and difficult to implement. As the U.S. auto industry has experienced, it is taking a long time to overcome the competitive advantage gained by the Japanese auto industry through quality improvement. The J.D. Powers 1986 Consumer Satisfaction Index of automobiles suggests, however, that Ford's dedicated approach to quality enhancement may be reaping benefits.

### ***One Competitive Strategy or Several?***

Although we focused on the pursuit of a common competitive strategy in our examples, this may be oversimplifying reality. For example, at Honda in Marysville, associates are encouraged to be innovative. Each year the group of associates that designs the most unique or unusual transportation vehicle is awarded a trip to Japan. At UPS, teamwork and cooperation are valued and at Frost, Inc., product and service quality are of paramount importance. Lincoln Electric is recognized as one of the lowest cost *and* highest quality producers of arc welders. While these examples indicate that organizations may pursue more than one competitive strategy at a time, it may be that organizations actually need to have multiple and concurrent competitive strategies. Using multiple strategies results in the challenge of stimulating and rewarding different role behaviors while at the same time trying to manage the conflicts and tensions that may arise as a consequence. This may be the very essence of the top manager's job. According to Mitchell Kapor of Lotus Development Corporation:

*To be a successful enterprise, we have to do two apparently contradictory things quite well: We have to stay innovative and creative, but at the same time we have to be tightly controlled about certain aspects of our corporate behavior. But I think that what you have to do about paradox is embrace it. So we have the kind of company where certain things are very loose and other things are very tight. The whole art of management is sorting things into the loose pile or the tight pile and then watching them carefully.<sup>36</sup>*

Perhaps, then, the top manager's job is facilitated by separating business units or functional areas that have different competitive strategies. To the extent that this separation is limited or that a single business unit has multiple strategies, effective means of confrontation and collaboration need to exist. However, even with this issue under control, there is another equally significant challenge.

### ***Change of Competitive Strategies***

By implication, changes in strategy should be accompanied by changes in human resources practices. As the products of firms change, as their customers' de-

mands change, and as the competition changes, the competitive strategies of firms will change. Consequently, employees will face an ever-changing employment relationship. A significant implication of this is that employees of a single firm may be exposed to different sets of human resource practices during the course of employment. Thus, employees may be asked to exhibit different role behaviors over time and they may be exposed to several different conditions of employment. Although it remains to be seen whether all employees can adjust to such changes, it appears that many can and have. For those who wish not to, firms may offer outplacement assistance to another firm, or even to another division in the company. For those who have problems changing, firms may offer training programs to facilitate the acquisition of necessary skills and abilities as well as needed role behaviors.

Another implication is that all components of a system of human resource practices need to be changed and implemented simultaneously. The key human resource practices work together to stimulate and reinforce particular needed employee behaviors. Not to invoke a particular practice (e.g., high participation) implies invoking another (e.g., low participation) that is less likely to stimulate and reinforce the necessary employee behaviors. The likely result is that employees will experience conflict, ambiguity, and frustration.

## Conclusion

The recent attack on U.S. firms for failing to keep costs down, not maintaining quality, and ignoring innovation are misdirected, given what many firms like Frost, Honda-Marysville, UPS, Corning Glass, A&P, 3M, and Brunswick are doing.<sup>37</sup> These firms and others are pursuing competitive strategies aimed at cost reduction, quality improvement, and innovation. The aim in implementing these strategies is to gain competitive advantage and beat the competition—both domestically and internationally. While cost and market conditions tend to constrain somewhat the choice of competitive strategy, the constraint appears to be one of degree rather than of kind. Consequently, we can find firms pursuing these three competitive strategies regardless of industry.

All firms are not seeking to gain competitive strategy. Not doing so, however, is becoming more of a luxury. For those attempting to do so, the experiences of other firms suggest that effectiveness can be increased by systematically melding human resource practices with the selected competitive strategy. Certainly, the success or failure of a firm is not likely to turn entirely on its human resource management practices, but the HRM practices are likely to be critical.<sup>38</sup> ■

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## ENDNOTES

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1. C. Fombrun, "An Interview with Reginald Jones," *Organizational Dynamics*, Winter 1982, p. 46.
2. D. C. Hambrick and P.A. Mason, "Upper Echelons: The Organization as a Reflection of Its Top Managers," *Academy of Management Review*, 9, 1984, 193-206; A. K. Gupta, "Contingency Linkages Between Strategy and General Manager Characteristics: A Conceptual Examination," *Academy of Management Review*, 9, 1984, 399-412; A. K. Gupta and V. Govindarajan, "Build, Hold, Harvest: Converting Strategic Intentions into Reality," *Journal of Business Strategy*, 4, 1984a, 34-47; A. K. Gupta and Govindarajan, "Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation," *Academy of Management Journal*, 9, 1984b, 25-41; M. Gerstein and H. Reisman, "Strategic Selection: Matching Executives to Business Conditions," *Sloan Management Review*, Winter 1983, pp. 33-49; D. Miller, M.F.R. Kets de Vries, and J.M. Toulouse, "Top Executives' Locus of Control and Its Relationship to Strategy-Making, Structure, and Environment," *Academy of Management Journal*, 25, 1982, 237-253; A. D. Szilagyi and D.M. Schweiger, "Matching Managers to Strategies: A Review and Suggested Framework," *Academy of Management Review*, 9, 1984, 626-637; and J.D. Olian and S.L. Rynes, "Organizational Staffing: Integrating Practice with Strategy," *Industrial Relations*, 23, 1984, 170-183.
3. Lee J.A. Byrne and A. Leigh Cowan, "Should Companies Groom New Leaders or Buy Them?" *Business Week*, September 22, 94-95.
4. Ibid.
5. A.J. Rutigliano, "Managing the New: An Interview with Peter Drucker," *Management Review*, January 1986, 38-41.
6. D.Q. Mills, *The New Competitors*, New York: The Free Press, 1985; and M. Beer, B. Spector, P.R. Lawrence, D.Q. Mills, and R.E. Walton, *Managing Human Assets*, New York: Macmillan, Inc., 1984; R.M. Kanter, "Change Masters and the Intricate Architecture of Corporate Culture Change," *Management Review*, October 1983, 18-28; and R.M. Kanter, *The Change Masters*, New York: Simon and Schuster, 1983.
7. J.L. Kerr, "Diversification Strategies and Managerial Rewards: An Empirical Study," *Academy of Management Journal*, 28, 1985, 155-179; J.W. Slocum, W.L. Cron, R.W. Hansen, and S. Rawlings, "Business Strategy and the Management of Plateaued Employees," *Academy of Management Journal*, 28, 1985, 133-154; D. C. Hambrick and C.C. Snow, "Strategic Reward Systems," in C. C. Snow (Ed.) *Strategy, Organization Design and Human Resources Management*, Greenwich, CT: JAI Press, 1987.
8. For detailed examples of how firms use their human resource practices to gain competitive advantage, see R.S. Schuler and I.C. MacMillan, "Gaining Competitive Advantage Through Human Resource Management Practices," *Human Resource Management*, Autumn 1984, 241-255; R. S. Schuler, "Fostering and Facilitating Entrepreneurship in Organizations: Implications for Organization Structure and Human Resource Management Practices," *Human Resource*

*Management*, Winter 1986, 607-629; and M.E. Porter, *Competitive Strategy*, New York: The Free Press, 1980; and M.E. Porter, *Competitive Advantage*, New York: The Free Press, 1985.

9. For an extensive discussion of competitive initiative, competitive strategy, and competitive advantage see I. C. MacMillan's "Seizing Competitive Initiative," *Journal of Business Strategy*, 1983, 43-57.
10. See Endnote 18, Porter, 1980, 1985.
11. B. Schneider, "Organizational Behavior," *Annual Review of Psychology*, 1985, 36, 573-611.
12. D. Katz and R.L. Kahn, *The Social Psychology of Organizations*, 2nd Ed., New York: John Wiley, 1978.
13. J.C. Naylor, R. D. Pritchard, and D.R. Ilgen, *A Theory of Behavior in Organizations*, New York: Academic Press, 1980; T. W. Dougherty and R.D. Pritchard, "The Measurement of Role Variables: Exploratory Examination of a New Approach," *Organizational Behavior and Human Decision Processes*, 35, 1985, 141-155.
14. J. R. Rizzo, R.J. Hose, and S.I. Lirtzman, "Role Conflict and Ambiguity in Complex Organizations," *Administrative Science Quarterly*, 14, 1970, 150-163; S.E. Jackson and R. S. Schuler, "A Meta-Analysis and Conceptual Critique of Research on Role Ambiguity and Role Conflict in Work Settings," *Organizational Behavior and Human Decision Processes*, 36, 1985, 16-78.
15. R. M. Kanter, "Supporting Innovation and Venture Development in Established Companies," *Journal of Business Venturing*, Winter 1985, 47-60.
16. H. DePree, *Business as Unusual*. Zeeland, MI: Herman Miller, 1986.
17. The following discussion is based on our survey and observations, and findings reported on by others. For a review of what others have reported, see R. S. Schuler's "Human Resource Management Practice Choices," *Human Resource Planning*, March 1987, 1-19.
18. M. McComas, "Cutting Costs Without Killing the Business," *Fortune*, October 13, 1986, p. 76.
19. For a detailed presentation of Marine Mercury's program to improve quality, see Endnote 18 above.
20. S. E. Prokesch, "Bean Meshes Man, Machine," *The New York Times*, December 23, 1985, pp. 19, 21.
21. S. E. Prokesch, "Are America's Manufacturers Finally Back on the Map?" *Business Week*, November 17, 1986, pp. 92, 97.
22. Ibid., p. 92.
23. Ibid., p. 97. For more on Electrolux's human resource practices, see B.J. Feder's "The Man Who Modernized Electrolux," *The New York Times*, December 31, 1986, p. 24.
24. Schuler, 1987.
25. E. E. Lawler III, "The Strategic Design of Reward Systems," in R. S. Schuler and S. A. Youngblood (Eds.), *Readings in Personnel and Human Resource Management*, 2nd Ed., St. Paul, MN: West Publishing, 1984, pp. 253-269; and R. S. Schuler, "Human Resource Management Practice Choices," in R. S. Schuler, S.A. Youngblood, and V.L. Huber (Eds.) *Readings in Personnel and Human Resource Management*, 3rd Ed., St. Paul, MN: West Publishing, 1988. Other factors that can influence the human resource practices are top management, hierarchical considerations, what other firms are doing, what the firm has done in the past, the type of technology, size and age of firm, unionization status, and the legal environment and its structure (see R. K. Kazanjian and R. Drazin, "Implementing Manufacturing Innovations:

Critical Choices of Structure and Staffing Roles," *Human Resource Management*, Fall 1986, 385-404).

26. P. F. Drucker, *Innovation and Entrepreneurship*, New York: Harper & Row, 1985; K. Albrecht and S. Albrecht, *The Creative Corporation*, Homewood, IL: Dow Jones-Irwin, 1987.

27. P. F. Drucker, "Quality Means a Whole New Approach to Manufacturing," *Business Week*, June 8, 1987, 131-143; P.F. Drucker, "Pul-eeze! Will Somebody Help Me?" *Time*, February 2, 1987, 48-57; and R. L. Desatnick, *Managing to Keep the Customer*, San Francisco: Jossey-Bass, 1987.

28. This description is expanded upon in detail by S. Galante, "Frost, Inc.," *Human Resource Planning*, March 1987, 57-67.

29. For additional collaborating information, see J. Merwin, "A Tale of Two Worlds," *Forbes*, June 16, 1986, 101-105; and S. Chira, "At 80, Honda's Founder Is Still a Fiery Maverick," *The New York Times*, January 12, 1987, p. 35.

30. As reported in Schuler and MacMillan, "Gaining Competitive Advantage Through Human Resource Management Practices," *Human Resource Management*, Autumn 1984, 249-250.

31. D. Machalaba, "United Parcel Service Gets Deliveries Done by Driving Its Workers," *The Wall Street Journal*, April 22, 1986, pp. 1 and 23.

32. M. McComas, "Cutting Costs Without Killing the Business," *Fortune*, October 13, 1986, p. 77.

33. *Ibid.*

34. M. McComas, "How A&P Fattens Profits by Sharing Them," *Business Week*, December 22, 1986, p. 44. For an excellent discussion of the difficulties to be overcome in dealing with changing from human resource practices based on hierarchy or status to those based on performance or what's needed, see R. M. Kanter, "The New Workforce Meets the Changing Workplace: Strains, Dilemmas, and Contradictions in Attempts to Implement Participative and Entrepreneurial Management," *Human Resource Management*, Winter 1986, 515-538.

35. For a discussion of relevant issues, see D. Q. Mills, "When Employees Make Concessions," *Harvard Business Review*, May-June 1983, 103-113; and R. R. Rehder and M.M. Smith, "Kaizen and the Art of Labor Relations," *Personnel Journal*, December 1986, 83-94.

36. *The Boston Globe*, January 27, 1985.

37. Recent attacks on public and private firms have been summarized by the use of the word "corpocracy." A description of corpocracy is found in M. Green and J. F. Berry's "Takeovers, a Symptom of Corpocracy," *The New York Times*, December 3, 1986.

38. The application of these human resource practices to strategy can be done by a firm on itself and even upon other firms that may be upstream or downstream of the local firm. For a further description, see Schuler and MacMillan (Endnote 30).