ON BECOMING A STRATEGIC PARTNER: THE ROLE OF HUMAN RESOURCES IN GAINING COMPETITIVE ADVANTAGE

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Although managers cite human resources as a firm's most important asset, many organizational decisions do not reflect this belief. This article uses the value, rareness, imitability, and organization (VRIO) framework to examine the role that the human resource (HR) function plays in developing a sustainable competitive advantage. Why some popularly cited sources of sustainable competitive advantage are not, and what aspects of a firm's human resources can provide a source of sustainable competitive advantage are discussed. The role of the HR executive as a strategic partner in developing and maintaining competitive advantage within the firm is also examined. © 1998 John Wiley & Sons, Inc.

Introduction

Human resource researchers and managers have long maintained that the human resource function plays an important role in firm performance. In fact, most corporate annual reports boldly state that the firm's people are its most important asset. Despite these widely held beliefs and all-too-frequent statements, however, many organizational decisions suggest a relatively low priority on both the human resources of the firm and the Human Resource (HR) department. For example, when organizations require cost cutting, they look first to investments in the firm's people, such as training, wages, and headcounts.

In addition, even when top managers value the firm's people, they may not value the HR department. For example, when asked how the founder and CEO of one of the most successful high technology companies in the world viewed the importance of human resources, the Director of Strategic Leadership Development replied,

> *Which do you mean? If you mean the Human Resource function, or what we call "big HR," then he doesn't have much value for them at all. If you mean the people of the company, or what we call "little hr," then he places an extremely high value on them.*

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If top managers publicly espouse their commitment to the firm's human resources, and the firm's HR function has substantial responsibility for managing this valuable firm resource, then why do many organizational decisions not evidence this stated commitment to people or a respect for the HR function? We believe that the fault lies, in part, with the fact that few HR executives can explain, in eco-

CCC 0090-4848/98/010031-16

nomic terms, how a firm's people can provide sustainable competitive advantage and the role that the HR function plays in this process. Furthermore, due to this lack of understanding, many HR executives fail to direct the HR activities toward developing characteristics of the firm's human resources that can be a source of sustainable competitive advantage.

In this article we examine the economics underlying the role of human resources in a firm's competitive advantage. We discuss the Resource-Based View of the Firm (Barney, 1991; Wernerfelt, 1984) and examine the value, rareness, imitability, and organization (VRIO) framework for analyzing sources of competitive advantage. The analysis provides executives in the HR function with the tools necessary to analyze how they can manage the function to develop a firm's people as a source of sustainable competitive advantage.

The Resource-Based View of Competitive Advantage

Academics and managers have both sought to understand the factors that determine the profitability of firms for many years. The resource-based view of organizations provides an economic foundation for examining the role of HR in firm competitive advantage. This view focuses on firm resources that can be sources of competitive advantage within the industry. Three basic types of resources can provide this competitive advantage (Barney, 1991). *Physical capital resources* include such things as the firm's plant, equipment, and finances. *Organizational capital resources* consist of such things as the firm's structure, planning, controlling, coordinating, and HR systems. Finally, *human capital resources* include such things as the skills, judgment, and intelligence of the firm's employees.

Because of its recognition of the potential for human assets of organizations to provide competitive advantage, many academic authors have applied the resource-based view to understanding the role of HR in organizations. For example, Wright, McMahan, & McWilliams (1994) used the resource-based framework to examine how a firm's human resources can be a source of sustainable competitive advantage. Lado and Wilson (1994) explored the potential for HR practices to be a source of competitive advantage. Snell, Youndt, and Wright (1996) attempted to integrate the resource-based view with the concept of organizational learning. Additional applications of the resource-based view to human resources are discussed in Jackson and Schuler (1995).

For the sake of our discussion of the role of HR in competitive advantage, similar to Wright et al. (1994), we focus on the characteristics of a firm's human resources, including all of the knowledge, experience, skill, and commitment of a firm's employees and their relationships with each other and with those outside the firm. While many implicitly believe that these characteristics can provide a firm with a source of competitive advantage, it is often difficult to specify which characteristics do so. In addition we consider HR practices to include all of the programs, policies, and practices that firms use to manage their human resources.

With this in mind, we propose that to identify the value of a firm's human resources to organizations as well as the proper role of the HR function in managing the firm's human resources to achieve such an advantage, one needs to ask four questions. These questions include the questions of Value, Rareness, Imitability, and Organization or what is referred to as the VRIO framework (Barney, 1995).

The VRIO Framework

The Question of Value

Firms create value through either decreasing product/service costs or differentiating the product/service in a way that allows the firm to charge a premium price. Thus, the ultimate goal of any HR executive is to create value through the human resource function. The first question that an HR executive must address is *"How can the HR function aid in either decreasing costs or increasing revenues?"*

Alcon Laboratories exemplifies the role of HR practices in directly decreasing costs. Trying to hold down the cost of health insurance, Alcon sought to encourage employees to take part in the less expensive Preferred Provider

Organization (PPO) rather than the traditional fee for service type plans. Vice President of HR, Jack Walters, noticed that many doctors who were part of the PPO were not the doctors currently used by employees. Thus, in negotiations, he asked MetLife to identify the doctors Alcon employees were using and recruit those doctors into the PPO. MetLife was able to bring most of those doctors into its PPO, and, as a result, Alcon's health insurance costs have increased at less than half of the industry average.

Increasing revenues, on the other hand, is a more foreign goal to HR managers but one in which they can play an important role. For example, Federal Express (now FedEx) illustrates the value created by human resources. Federal Express managers stress that they are a "people-first" organization. The corporate philosophy statement sums up their view of the source of competitive advantage: "People–Service–Profit." Fred Smith, founder and CEO of the firm, says, "We discovered a long time ago that customer satisfaction really begins with employee satisfaction" (Waterman, 1994). In other words, the FedEx philosophy is that people are the primary link in the value chain, and thus, value is created by focusing first on employees.

How is this operationalized to create value? This emphasis on employee satisfaction is illustrated by FedEx's annual attitude survey. Most organizations administer attitude surveys from time to time, and occasionally use the information gleaned from the surveys to address the most glaring organizational problems. At FedEx, however, the attitude survey forms part of the annual managerial evaluation and reward process. The survey addresses the atmosphere of an individual's immediate work group, the immediate manager, the managers at levels higher in the organization, and the company's atmosphere in general. Scores on the items covering the work group and the immediate manager form "the leadership index."

This index is used in two ways. If an individual manager receives low scores on the index from the employees reporting to him/her, that manager faces a year-long probation. During that time the manager is expected to improve the scores to an acceptable level or face some type of punitive action. Second, each year a goal is set for the company's score on the leadership index. If the goal is not met, the top 300 managers in the firm do not receive any bonus, which usually is about 40% of base salary. By linking rewards and punishment to employee satisfaction levels, the firm ensures that employees are treated right. When they are treated right, they treat customers right—and create value.

FedEx's philosophy has gained an increasing base of emprical support. For example, Schneider and Bowen (1985) hypothesized that HR practices would be related to employee attitudes which would consequently be related to customer satisfaction. They found significant relationships between HR practices and customer reports of the quality of service they received in a sample of banks. Schlesinger and Zornitsky (1991) found that job satisfaction predicted employees' perceptions of service quality as well as the discrepancy between employee and customer perceptions of quality. Ulrich, Halbrook, Meder, Stuchlik, and Thorp (1991) found significant relationships between the tenure of employees and customer satisfaction. Tornow and Wiley (1991) found that employee attitudes such as job satisfaction were related to measures of organizational performance. Finally, most recently, Schmit and Allscheid (1995) found that employees' climate perceptions of management, supervisor, monetary, and service support were related to employee affect. Affect was related to service intentions, which was related to customer service. Empirical research thus supports the notions that employee satisfaction is linked to service quality and that HR practices are important determinants of employee satisfaction.

At Fed Ex, however, the attitude survey forms part of the annual managerial evaluation and reward process.

Finally, some HR practices can impact *both* costs and revenues. Continental Airlines has recently experienced a tremendous turnaround in which the HR function played a vital role. One of the frequently cited HR practices responsible for this turnaround was the on-time bonus, an incentive system in which each employee was paid a bonus of $65 for every month the airline was at the top of the industry in on-time performance (Boissueau, 1995). While this may seem like it comes straight from any introduction textbook (Barlow, 1996), its origin was not nearly so simple. In early 1995, after years of pay cuts or no pay raises, top management discovered that it again would be unable to give pay raises to employees. HR executives recognized that taking that message to the employees at a critical phase of the turnaround would destroy morale and greatly impede the cultural shift under way. HR executives along with line executives came up with the idea of the on-time bonus.

This bonus has resulted in Continental moving from last to first in the industry in on-time performance and consequently has both decreased costs and increased revenues. On the cost side, last year it paid out $51 million in bonuses but saved $75 million in lower passenger accommodation costs such as money for meals and hotel rooms associated with missed connections. On the revenue side, the bonus has been instrumental in restoring employee morale and, thus, increasing customer satisfaction. In addition, because on-time performance is an important criterion for the higher revenue business traveler, this bonus has a strong impact on the firm's revenues as they have increased their share of the business traveler market.

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The Question of Rareness

The value of a firm's human resources is a necessary but not sufficient criteria for competitive advantage. If the same characteristic of human resources is found in many competing firms then that characteristic cannot be a source of competitive advantage for any one of them. Valuable but common characteristics of human resources provide only competitive parity, ensuring that a firm is not at a substantial competitive disadvantage because it does not possess that characteristic. Thus, an HR executive must examine how to develop and exploit rare characteristics of the firm's human resources to gain competitive advantage.

The HR executive must attempt to develop and nurture characteristics of the firm's human resources that cannot easily be imitated by competitors.

For example, most firms view the labor pool for particular jobs as relatively homogeneous. Within any labor pool, however, differences exist across individuals in terms of their job-related skills and abilities. If the assumption exists across firms that the labor pool is homogeneous, there would be tremendous potential to exploit the rare characteristics of those employees for competitive advantage (Wright et al., 1994).

For example, Nordstrom's exists in the highly competitive retailing industry. This industry is usually characterized as having relatively low skill requirements and high turnover for sales clerks. Nordstrom's, however, has attempted to focus on individual salespersons as the key to its competitive advantage. It invests in attracting and retaining young, college-educated sales clerks who desire a career in retailing. It provides a highly incentive-based compensation system that allows Nordstrom salespersons to make as much as twice the industry average in pay. The Nordstrom culture encourages sales clerks to make heroic efforts to attend to customers' needs, even to the point of changing a customer's flat tire in the parking lot. The recruiting process, compensation practices, and culture at Nordstrom's have helped the organization to maintain the highest sales per square foot of any retailer in the nation. Nordstrom's has taken what is considered to be a relatively homogeneous labor pool and exploited the rare characteristics of its employees to gain a competitive advantage.

The Question of Imitability

Valuable and rare characteristics of a firm's human resources can provide above normal profits for the firm in the short term; however, if other firms can imitate these characteristics, then over time the characteristics will provide no more than competitive parity. The HR executive must attempt to develop and nurture characteristics of the firm's human resources that *cannot* easily be imitated by competitors. This points to focusing on the importance of socially complex phenomena such as an organization's unique history or culture in providing competitive advantage.

Every firm has a unique history that defines the present situation. This history often provides a foundation for a competitive advantage which other firms would find impossible to imitate. For example, in a recent conversation, a high-level executive at one of DuPont's competitors bemoaned the fact that no matter what his firm did (including purchasing DuPont's safety training programs), they simply were unable to match DuPont's safety record. When asked why, his response was simply, "When a firm starts out by making dynamite, something happens that just instills in employees' minds the importance of safety." Thus, DuPont's superior safety performance stems at least in part from its unique history that competitors would find impossible to imitate.

Southwest Airlines exemplifies the role that socially complex phenomena such as culture play in competitive advantage. According to the company's top management, the firm's success can be attributed to the "personality" of the company; a culture of fun and trust that provides employees with both the desire and the discretion to do whatever it takes to meet the customers' needs. The "fun" airline uses an extensive selection process for hiring flight attendants who will project the fun image of the airline. Applicants must go through a casting call type exercise where they are interviewed by a panel that includes current flight attendants, managers, and customers. The applicants tell stories, such as their most embarrassing experience, in front of the panel and other applicants. Those who make it through the panel interview are then examined against a psychological profile that distinguished outstanding past flight attendants from those who were mediocre or worse.

In addition to the extensive selection process, employees are empowered to create an entertaining traveling environment by a strong organizational culture that values customer satisfaction. Says Herb Kelleher, CEO:

> *We tell our people that we value inconsistency. By that I mean that we're going to carry 20 million passengers this year and that I can't foresee all of the situations that will arise at the stations across our system. So what we tell our people is, "Hey, we can't anticipate all of these things,* you *handle them the best way possible.* You *make a judgment and use* your *discretion; we trust you'll do the right thing. If we think you've done something erroneous, we'll let you know—without criticism, without backbiting."* (Quick, 1992)

This extensive selection process and the strong organizational culture contribute to the differentiated service that has made Southwest Airlines the most financially successful airline over the past 20 years and has enabled it to continually be among the best in the industry for having the fewest customer complaints.

Seeing this financial success, competitors such as Continental Airlines (Continental Lite) and United Airlines (United Express) attempted to compete with Southwest Airlines by providing low cost service to a number of destinations. Continental Lite ceased operations within a year, and United, while having survived, is still losing to Southwest in most markets where they compete.

Before Continental and United even entered the market, the VRIO framework could have accurately predicted the success potential for such a competitive response. Kelleher believes that Southwest's superior performance has happened because its culture simply cannot be imitated. Kelleher summarizes the resource-based view of competitive advantage when he states:

> *Maybe someone could equal the cost . . . possibly they could. And maybe someone could equal the quality of service that goes along with that and constitutes great value . . . possibly they could. But the one thing they would find it impossible to equal very easily is the spirit of our people and the attitude they manifest toward our customers.* (Quick, 1992)

In other words, the human resources of Southwest Airlines serve as a source of sustained competitive advantage because they create value, are rare, and are virtually impossible to imitate.

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The Question of Organization

Finally, in order for any characteristic of a firm's human resources to provide a source of sustained competitive advantage, the firm must be organized to exploit the resource. Organization requires having in place the systems and practices that allow human resource characteristics to bear the fruit of their potential advantages.

For example, both General Motors (GM) and Ford historically have recruited assembly line workers from the same basic labor market. There is little evidence that the skill levels of Ford's workers are significantly higher than those of General Motors' workers. Ford, however, has been more successful at developing a cooperative, team-based culture than has General Motors. Both automakers set out to develop employee involvement programs during the late 1970s and early 1980s. Ford more successfully changed the culture and HR systems to allow for, and even value, employee participation in decision making, relative to GM. Ford's culture and HR systems allow for employees to participate in decision making and to utilize cognitive skills that the GM systems have been less able to exploit (Templin, 1992). In addition, as Ford moves toward hiring even more highly skilled employees through an extensive assessment process, its participative system will leave it poised to increase its relative advantages over GM (Templin, 1994).

The question of organization focuses attention on systems, as opposed to single HR practices. Recent work on HR practices and firm performance seems to indicate that HR practices are maximally effective when they exist as a coherent system. Wright and Snell (1991) argued that Strategic Human Resource Management required coordinated HR activities across the various subfunctions. Similarly, Wright and McMahan's (1992) definition of Strategic HRM called for "horizontal integration" of the various HR practices rather than viewing each in isolation. Lado and Wilson (1994) hypothesized that the more complex the HR system, the more likely it would be to serve as a source of sustainable competitive advantage. MacDuffie (1995), in a study of automobile manufacturing firms, found that performance was maximized when "bundles" of HR practices were linked with participative work systems and flexible production systems. Wright, McCormick, Sherman, & McMahan (1996) found that HR practices such as selection, appraisal, and compensation were unrelated to the financial performance of petrochemical refineries alone, but that they were strongly positively related to performance among refineries that had highly participative work systems. These research studies seem to indicate a need for HR functions to pay attention to the system of HR practices, rather than to focus on each in isolation.

Both quantitative and qualitative data gathered from an ongoing research study conducted by the second author, however, indicate that very few companies are spending much time and attention on coordinating each of the various HR subfunctions (e.g., staffing, compensation, training, etc.) with one another. Of 13 firms in the study, only two have actively attended to achieving integration among the compensation, selection, training, and appraisal systems and processes. It appears that firms that do make such efforts have at least temporary advantages over their competitors.

These examples illustrate how the VRIO framework can be used to analyze the ways in which a variety of firms have attempted to develop their human resources as a source of sustainable competitive advantage. Figure 1 illustrates how to use the VRIO framework to analyze the potential for firm resources to be sources of competitive disadvantage, competitive parity, competitive advantage, and sustained competitive advantage. According to this framework, aspects of human resources that do not provide value can only be a source of competitive disadvantage. These resources or activities are ones that HR executives should be discarding from the HR function. Aspects of human resources that provide value but are not rare, are sources of competitive parity. These resources are not to be dismissed as useless; not to have them is a source of competitive disadvantage, but because other firms possess them, they cannot provide an advantage in the competitive arena. Temporary competitive advantage stems from resources that provide value and are rare but are easily imitated. If these resources do serve as a source of competitive advantage, then other firms will soon imitate them, resulting in competitive parity. Finally, aspects of human resources that are valuable, rare, and not easily imitated, can be sources of sustained competitive advantage, but only if the firm is organized to capitalize on these resources.

Clearly the HR function, through either directly controlling or strongly influencing the characteristics of human resources in organizations, plays an important role in developing and maintaining a firm's competitive advantage. Simply making the case that HR *can* in-

Is a resource . . .

Valuable?	Rare?	Difficult to Imitate?	Supported by Organization?	Competitive Implications	Performance
No	----	----		Competitive Disadvantage	Below Normal
Yes	No	----		Competitive Parity	Normal
Yes	Yes	No		Temporary Competitive Advantage	Above Normal
Yes	Yes	Yes		Sustained Competitive Advantage	Above Normal

FIGURE 1. The VRIO framework. [from J. Barney, GAINING AND SUSTAINING COMPETITIVE ADVANTAGE, (Table 5.2, page 163). © 1997 Addison-Wesley Publishing Company, Inc. Reprinted by permission of Addison Wesley Longman.]

fluence a firm's performance, however, is only part of the story. In order for HR to *truly develop* and *maintain* sources of competitive advantage, HR executives need to focus attention and activities toward those aspects of the firm's resources that will provide such advantages. In the next section we discuss the implications of the VRIO framework sources of sustained competitive advantage that might be influenced by leaders of the HR function in organizations.

Implications for Competitive Advantage

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Sustainable Competitive Advantage Stems from Firm-Specific More Than General Skills

Human Capital Theory (Flamholtz & Lacey, 1981) distinguished between general skills and firm-specific skills of human resources. General skills are skills possessed by individuals that provide value to a firm and are transferable across a variety of firms. For example, all competitor firms have the potential to accrue equal value from acquiring employees with knowledge of general management, the ability to apply financial ratios, or general cognitive ability. Specific skills, on the other hand, provide value *only* to a particular firm and are of no value to competing firms. For example, the knowledge of how to use a particular technology used only by one firm or knowledge of a firm's policies and procedures provide value to that firm but usually would not be valuable to other firms.

Because general skills provide equal value to all firms, one would expect that, given even moderately efficient labor markets, these would not be a source of competitive advantage for any one organization; thus, to seek to gain sustained competitive advantage through general skills would be futile. On the other hand, there are two reasons that this does not imply that these skills are not important. *First,* general skills are necessary for maintaining competitive parity. For example, basic reading and writing skills are general skills that will not provide competitive advantage to any one firm; however, a firm that hired many employees who could *not* read and write would be at considerable disadvantage in the marketplace. *Second,* most organizations have defined the "New Deal" between the firm and its employees. This new psychological contract (Rousseau & Greller, 1994) is characterized by employers assuring that they will not guarantee employment but will guarantee employability to people (Kissler, 1994). This requires providing employees with the necessary training and development that ensures them marketability to other firms (i.e., general skills). Firms that fail to invest in general skills will be unable to attract and retain competent employees.

In addition, while general skills are applicable across organizations and thus most likely to result in only competitive parity, this does not preclude gaining competitive advantage through obtaining the highest level of general skills. For example, Wright et al. (1994) argued that firms that were able to obtain the highest level of average cognitive ability would have a competitive (and possibly sustainable) advantage. We would not argue for ignoring the importance of general skills; they add value and at the highest level are rare.

Greater potential for sustainable competive advantage stems from investments in firm-specific skills. One avenue to sustained competitive advantage is to focus on developing a firm-specific skill base within an organization because these skills cannot be easily duplicated by competitors. These skills provide competitive advantage because they provide value to the firm, but they are not easily marketable by the employees who possess them. One can accomplish this through investing in constant training and development of employees to perform work processes and procedures that are specific to the firm. In fact, central to the concept of organizational learning is the process of developing and disseminating tacit knowledge (i.e., firm-specific knowledge) throughout the firm (Miller, 1996; Senge, 1990). The firm gathers the rents accruing from these firm-specific skills while providing employees with the opportunity for growth and development.

The importance of firm-specific skills highlights the potential shortsightedness of outsourcing most or all of a firm's training and development activities. Outsourced activities such as these most effectively provide general rather than firm-specific skills. While some training firms may be able to develop tailor-made programs for specific firms, these are not feasible when proprietary technologies and processes exist. In addition, the training firm which develops the tailor-made programs consequently acquires the skills and can theoretically (although not ethically and possibly not legally) exploit them with competing firms. For these reasons, while some training activities can and should be outsourced, outsourcing of all training activities is not likely to serve as the lever for gaining sustainable competitive advantage through people.

Sustainable Competitive Advantage Comes from Teams More Than from Individuals

Much of the popular literature on top management seems to point to individual Chief Executive Officers (CEOs) such as Lee Iaccoca at Chrysler, Jack Welch at GE, or Lawrence Bossidy at AlliedSignal, as sources of sustainable competitive advantage. Similarly, much of the academic work on matching human resources to organizational strategies has focused on top managers and ignored the lower level employees (Gerstein & Reisman, 1983; Gupta & Govindarajan, 1984; Guthrie, Grimm, & Smith, 1991). The inherent assumption in this research is that the skills of the work force are all common across firms but that highly skilled individual managers or top management teams are more rare (Wright et al., 1994). This implies that the firm that has the right CEO or President might possess a source of sustained competitive advantage. While these individuals are quite valuable, if labor markets are at all efficient, they are not likely a source of sustained competitive advantage.

Individuals who possess valuable and rare skills are usually able to claim most of the rents that are attributable to those skills (Wright et al., 1994). An outstanding Chief Executive, because of the high visibility of his or her performance, will soon be approached by other organizations with higher compensation. In the bidding process for that individual's services s/he can claim most of the rents, and, therefore, the rents will not accrue to whichever firm ultimately obtains that individual's services.

Numerous recent shifts of top managers from one firm to another (e.g., Gerstner to IBM) as well as the rapidly rising top executive pay exemplify the futility of seeking sustainable competitive advantage from the skills of one individual. On the other hand, the exploitation of the synergistic value from a large number of individuals who work together is quite costly if not impossible for competitors to imitate. Teams or larger groups, due to causal ambiguity and social complexity, provide greater potential to be a source of sustainable competitive advantage.

Alchian and Demsetz (1972) defined team production as "production in which (1) several types of [human] resources are used and (2) the product is not a sum of the separable outputs of each cooperating resource" (p. 779). Because output is more than the sum of the separable outputs of each cooperating resource, it is difficult, if not impossible, to identify the specific source of the competitive advantage. In other words, the competitive advantage stemming from team production is characterized as being causally ambiguous, thus making it difficult for competitors to imitate.

An additional benefit of team production is that individuals become linked in transaction-specific relationships, resulting in transaction-specific human capital. In other words, team members become involved in socially complex relationships that are not transferable across organizations, thus only benefiting the organization in which these relationships develop. This nontransferability requires the development of a team orientation, as has been exemplified among the top managers at Continental Airlines. One part of its turnaround was the replacement of 36 of the company's top officers within a 12-month time frame. CEO Gordon Bethune states, "Why do you think most of those VPs disappeared? Most of them could not be team players." This has resulted in a reorientation among the top managers at Continental to focus on team goals instead of being strictly focused on their own personal goals (Boissneau, 1995).

This highlights the importance of the HR function in developing and nurturing the relationships among organizational members. Many traditional organizational development activities such as team building and conflict resolution are now found in the HR departments of the Fortune 500 companies (McMahan & Woodman, 1992). In addition, researchers are beginning to explore trust among organization members as one determinant of firm performance (Mishra & Mishra, 1994). Clearly trust and good relationships among organizational members are firm-specific assets that provide value, are quite rare, and are extremely difficult for competitors to imitate.

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Sustainable Competitive Advantage Stems from HR Systems More Than from Single HR Practices

Much of the writing on Strategic Human Resource Management has focused on human resource practices as a source of competitive advantage (Schuler & MacMillan, 1984). The assumption is that firms that engage in the best human resource practices, that is, have the best selection system, or best training program, or best reward system, etc., will have a competitive advantage over firms that fail to use this particular practice. Both the work on Utility Analysis of HR programs (Boudreau, 1991; Cascio, 1987; Jones & Wright, 1992; Steffy & Maurer, 1988) and empirical work on the relationship between HR practices and performance (e.g., Terpstra & Rozelle, 1993) have demonstrated that HR practices do provide value to the firm.

While each of these practices provides value, within the VRIO framework they are not likely to be sources of sustained competitive advantage. Given the recent emphasis on benchmarking to identify the most effective HR practices, any individual effective practice is easily imitated, and thus, can provide an advantage only for a short time—until competitors can copy it.

The fact that these individual practices will not likely lead to sustainable competitive advantage does not imply that these practices are unimportant and HR executives can ignore identifying the best practice for each of the various HR activities. The failure to invest in state-of-the-art selection, training, and reward systems can result in a firm having a competitive *disadvantage* among human resources. In addition, a series of temporary competitive advantages gained through constant innovation is still quite valuable to the firm.

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The challenge for HR is to develop systems of HR practices that create a synergistic effect rather than develop a set of independent best practices of HR (Becker & Gerhart, 1996; Lado & Wilson, 1994; Wright & Snell, 1991). This requires a changing mindset from the traditional subfunctional (selection, training, appraisal, compensation, etc.) view of HR to one where all of these independent subfunctions are viewed as interrelated components of a highly interdependent system. The interrelatedness of the system components makes the advantage difficult, if not impossible, for competitors to identify and copy. It also requires investing time and energy into developing systems and structures for integrating various HR practices such that they complement, rather than conflict with, one another. While this sounds quite commonsensical, our conversations with a number of HR executives consistently indicate that very few HR departments have developed any such systems and structures. Firms that have developed highly integrated systems seem to have obtained a source of sustainable competitive advantage. Recent research on bundles of HR practices supports this notion (Delery & Doty, 1996; MacDuffie, 1995; Youndt, Snell, Dean, & Lepak, 1996).

These implications of the VRIO framework run against the grain of much of current management thinking that emphasizes the importance of finding the right CEO, outsourcing HR functions, or seeking sustained competive advantage through finding one best HR practice. They do not imply that these activities are not valuable, but only that they are incomplete, particularly in guiding the decision making of HR executives. The following section examines implications of the VRIO framework for HR executives.

Implications for HR Executives

The VRIO framework presents a number of implications for HR executives. In general it highlights the fact that HR executives play an important role in managing the firm's human assets, those which possess the greatest potential for being sources of sustainable competitive advantage. More specifically, it provides guidance regarding the management of the HR function in organizations in ways that create competitive advantage. Four of these major implications are outlined below, with questions to help guide the HR executive in managing the function.

1. Understand the Value of People in the Firm and Their Role in Competitive Advantage

Knowing the economic value of the firm's human resources is a necessary precondition before any HR executive can begin to manage the function strategically. Reichheld (1996) notes that people contribute to firms in terms of efficiency, customer selection, customer retention, customer referral, and employee referral. People play an important role in the success of any firm but which people do so and how may vary across firms. This knowledge is a necessary starting point for any HR executive to act as a strategic partner.

For example, our research indicates that firms that rely heavily on innovation and product development (e.g., Merck) argue that their research and development (R&D) scientists' ability to develop successful new products is the major thing that distinguishes those companies from competitors. Manufacturing firms such as Dell Computer, on the other hand, emphasize the production efficiency advantages they can gain through harnessing all of their peoples' skills and effort. Finally, service-oriented firms such as Continental Airlines note that the planes, routes, gates, and fares are virtually identical within the industry. Their competitive advantage can only come through efficient, friendly service that makes fliers want to make their next flight on Continental.

Similarly, while all of the firm's people are important, some provide greater leverage for competitive advantage. Because of the need for innovation, Merck's R&D scientists provide greater leverage for success than do the hourly manufacturing employees. On the other hand, it is the hourly line employees (ticket agents, flight attendants, gate crews, baggage handlers) who directly impact the flying experience that have a relatively stronger impact on competitive advantage for Continental Airlines.

Thus, HR executives must first understand the role of the firm's people in competitive advantage before being able to make decisions about how to position the deliverables of the function. This leads to the following questions for these executives:

- On what basis is the firm seeking to distinguish itself from competitors? Production efficiency? Innovation? Customer service?
- Where in the value chain is the greatest leverage for achieving this differentiation?
- Which employees or employee groups provide the greatest potential to differentiate a firm from its competitors?

2. *Understand the Economic Consequences of the Human Resource Practices in a Firm*

Once an HR executive understands the specific ways in which the firm's people provide value, it is necessary to examine the value that HR provides or can provide. Recent research has uncovered a relationship between HR practices and the financial performance of firms (Huselid, 1995; MacDuffie, 1995; Youndt, Snell, Dean, & Lepak, 1996). While this research is promising, more research is needed on how, exactly, this impact is gained. We believe that there are two basic ways.

First, HR practices are important levers by which firms develop human capital and employee commitment. It is the HR practices that can directly impact the skills of the work force that can provide value to the firm. These practices also can help to develop committed employees who are willing to allocate their discretionary behavior toward organizational ends (MacDuffie, 1995; Wright et al., 1996). In other words, HR practices play an important role in developing the human assets that provide competitive advantage.

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It is also important to understand that HR practices and the HR function incur costs for organizations. HR can impact firm performance through its efficiency in developing the human assets that are a source of competitive advantage (Ulrich, 1997). The products and services provided by the HR function can be too many or too few, of high quality or of low quality, directly linked to business needs or unrelated to the business. For example, HR practices developed because they are the latest fad, without a careful analysis of their ability to meet strategic business needs, are both excessive and inefficient. Similarly, the failure to develop practices that will help address business needs results in less than optimal organizational effectiveness. Finally, HR practices designed to meet business needs that are delivered at excessive cost or with low quality negatively impact the firm's financial performance. HR executives need to assess *both* the menu of HR practices and services offered as well as the quality and efficiency in their delivery.

As part of Continental Airlines' turnaround, for example, the HR function took a long look at what services it provided and how efficiently those services were provided. The result of this analysis was the elimination and consolidation of a number of training programs that simply were unrelated to the business while keeping some of the remaining training programs internal to the firm, the outsourcing of benefits and some training/development activities, and the development of a variety of variable pay plans (the on-time bonus, management bonus plans, profit sharing, etc.). Even today the firm is exploring further outsourcing and strategic partnerships as ways to reduce the costs of the function. Finally, in an effort to remain close to its customers, the HR function recently surveyed the company's officers regarding the importance of the services provided by HR as well as HR's effectiveness at delivering those services. This effort will identify areas for further improvement.

HR executives seeking to explore the value created by their functions need to ask the following questions:

- Who are your internal customers and how well do you know their part of the business?
- Are there organizational policies and practices that make it difficult for your internal clients to be successful?
- What services do you provide? What services should you provide? What services should you not provide?
- How do those services reduce internal customers' costs/increase their revenues?
- Can those services be provided more efficiently by outside vendors?
- Can you provide those services more efficiently?
- Do managers in the HR function understand the economic consequences of their jobs?

3. *Understand How the Human Resources and Human Resource Practices in a Firm Compare to Those in Competing Firms*

The previous two points focus the HR executive's attention within the organization. In a competitive environment, however, one cannot ignore the actions of competitors, and this is also true of HR. It is necessary to examine the HR functions of competitors to gain an understanding of what HR practices and relationships define the present competition. This information is only valuable insofar as it is used for developing strategies for changing the competitive landscape to a firm's advantage.

Such benchmarking activity has become almost commonplace in industry as firms look both within and outside their industries seeking the "best practices." Benchmarking provides information that can be valuable or useless, depending upon how it is used. If the goal of the activity is simply to identify the HR practices of successful firms in order to imitate them, then the costs will likely outweigh the benefits. Benchmarking identifies the rules of competition in an industry and can be maximally valuable in providing information on two issues.

First, it helps firms to identify what superior practices the competition is engaged in which might provide them a competitive advantage until other firms are able to imitate it. For example, five years ago Nieman Marcus, the upscale retailer, implemented a sophisticated applicant tracking system that significantly reduced its recruiting costs. Because the system was purchased from an outside vendor, it did not take long for competitors to imitate the advantage through implementing similar systems. Had competitors not identified the system as an advantage, however, their financial performance might have suffered needlessly.

Second, benchmarking should be used to identify ways to leapfrog competitors. This is accomplished through developing innovative HR practices and is especially successful if they are ones that competitors will find it costly or difficult to imitate. For example, one of Merck's manufacturing plants recently shifted to a variable pay system resembling a gainsharing type plan. This plan has been hugely successful even while other plants in the industry and geographic area have been disbanding such plans. Why did it work at Merck? Merck's manufacturing managers attribute the success to the fact that the company has traditionally had a culture that is characterized by high levels of trust between employees and management. The compensation system, while imitable in formulas, structures, and procedures, was not imitable in practice since its success was contingent on Merck's unique history and culture.

HR executives need to understand their functions in relationship to competitors as a means of identifying which practices should be copied to maintain competitive parity, which practices can be innovatively delivered to provide temporary advantage, or which practices can be linked to the unique situation (culture, history, other management systems, etc.) of the firm in order to gain sustainable competitive advantage. This understanding leads to the following questions for HR executives:

- How do the work force skills of your competitors (particularly in key jobs) compare to those in your firm?
- How does the commitment level of your work force compare to that of competitors?
- What are your competitors' HR functions doing in terms of practices and relationships with line managers? How can you beat them by doing things better or differently?
- What unique aspects of your firm (e.g., history, leadership, culture, etc.) might allow you to develop and/or maintain a more highly skilled and highly committed work force?
- What HR practices need to be developed or maintained to exploit these unique aspects of your firm?
- Given your firm's history and culture, what unique HR practices might you be able to implement more efficiently and effectively than your competitors?

4. Understand the Role of the Human Resources Function in Building Organizational Capability for the Future

A constant tension exists in the trade-offs between focusing decision making and resource allocation on the short and long term in most organizations. This conflict also exists within the HR function. Many HR functions are struggling so hard to meet current needs that they have little time to explore long-term organizational plans. This tendency must be broken if HR executives want to play the role of strategic partner.

For example, a high tech manufacturing firm we are familiar with has seen tremendous growth in both revenues and headcount over the past four years. This growth has resulted in the HR function struggling to keep up with the hiring and training needs of a firm growing by 40% per year. Such growth also had made it difficult for the HR function to pay attention to developing the organizational infrastructure necessary to maintain the growth. Over the past two years the HR function in this firm has begun investing in developing organizational capability through the creation of a succession and developmental planning system for the management team and a human resource planning system for the rest of the organization. Without such an investment, the firm's growth prospects would be substantially limited.

In spite of the need to deliver the traditional HR services to meet the organization's current needs, HR executives must consider the future organization's needs through answering the following questions:

- What is the firm's core competence, or the core competence the firm is trying to develop in the next 5–10 years?
- What will be the competitive landscape 5–10 years from now in terms of your firm's product markets and labor markets?
- What kind of human resources will your firm need to compete successfully five years from now? Ten years from now?
- What types of HR practices are needed today to build the organization needed in the future?

Conclusion

One important implication of the VRIO framework is that the Human Resource function manages the set of resources (e.g., human capital skills, employee commitment, culture, teamwork, etc.) that are most likely to be sources of sustained competitive advantage into the next century. This implication should illustrate the increasing importance of HR in influencing organizational performance in today's competitive environment. In addition to highlighting the important role that the HR executive plays, it also provides guidance for the HR executive in how to effectively gain and maintain the role of strategic partner.

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The VRIO framework helps the Human Resource executive to evaluate all of the activities of the function against the criteria of value, rareness, imitability, and organization. Again, HR activities that are valuable but not rare, or valuable and rare but imitable, are not

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to be ignored. These are the activities that the function must perform to maintain competitive parity or to provide temporary competitive advantages. For example, competitor firms are likely to be able to imitate a particular selection system that identifies cognitive abilities, technical skills, and/or interpersonal skills that provide value; however, to fail to identify these skills through selection can result in a severe competitive disadvantage.

The ultimate quest should be for the HR function to provide the firm with resources that *provide value, are rare, and cannot be easily imitated* by other organizations. This quest entails developing employees who are skilled and motivated to deliver high quality products and services, and managing the culture of the organization to encourage teamwork and trust. It also requires that HR functions focus more attention on developing coherent systems of HR practices that support these aims.

More importantly, however, is that the VRIO framework points to the need for an entirely new mindset regarding the role of HR executives in the organization. Many HR executives complain that they have not been invited to the strategic planning table. Upon examination, however, it becomes clear that these executives either are unaware of or unable to clearly communicate to the strategic planners any economic reason why they should be at the table. It appears that there are far too many HR executives who view themselves as Human Resource people who happen to work in a business, rather than as business people who happen to work in the Human Resource function. The VRIO framework enables business people in HR to transform the HR function from being a drain on firm resources into a contributor to firm performance.

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