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## **HUMAN RESOURCE SYSTEMS AND SUSTAINED COMPETITIVE ADVANTAGE: A COMPETENCY-BASED PERSPECTIVE**

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**Drawing on the theoretical insights from the resource-based view of strategic management, this article explores the potential of human resource systems to facilitate or inhibit the development and utilization of organizational competencies. These competencies—managerial, input-based, transformational, and output-based—are presumed to yield sustained competitive advantage for a firm. The competency-based perspective, by focusing attention on the HR activities, functions, and processes that enhance or impede competency accumulation and exploitation, complements the behavioral perspective (Schuler & Jackson, 1987) and, thus, potentially enhances the understanding of strategic human resource management.**

A stream of strategy research has emerged that generally posits that organizational resources and capabilities that are rare, valuable, non-substitutable, and imperfectly imitable form the basis for a firm's sustained competitive advantage (e.g., Barney, 1986a, 1991). This "resource-based view" (Conner, 1991; Wernerfelt, 1984) of organizational strategy and competitive advantage has recently engendered a great deal of theoretical and empirical efforts (Amit & Schoemaker, 1993; Barney, 1991; Conner, 1991; Hansen & Wernerfelt, 1989; Lado, Boyd, & Wright, 1992; Mahoney & Pandian, 1992; Reed & DeFillippi, 1990; Rumelt, 1991; Teece, Pisano, & Shuen, 1990).

The resource-based view suggests that human resource systems can contribute to sustained competitive advantage through facilitating the development of competencies that are firm specific, produce complex social relationships, are embedded in a firm's history and culture, and generate tacit organizational knowledge (Barney, 1992; Reed & DeFillippi, 1990; Wright & McMahan, 1992). The sustained superior performance of the most admired companies, such as Marriott, Borg-Warner, and Merck,

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has been attributed to unique capabilities for managing human resources to gain competitive advantage (Ulrich & Lake, 1990). Conversely, to the extent that HR systems inhibit the mobilization of new competencies and/or destroy existing competencies, they may contribute to organizational vulnerability and competitive disadvantage.

Researchers, drawing largely on a behavioral psychology perspective, have addressed the link between human resource management practices and competitive advantage (e.g., Schuler & Jackson, 1987; Schuler & MacMillan, 1984). From this perspective, researchers have argued that human resource management practices can contribute to competitive advantage insofar as they elicit and reinforce the set of role behaviors that result in lowering costs, enhancing product differentiation, or both (Schuler & Jackson, 1987). This perspective has contributed enormously to theory, research, and practice in the field of strategic human resource management (SHRM) in several important ways: It "provides a clear explanation for why [HR practices] would—and should—be linked to strategy; it posits a testable mediating construct (required behaviors); it helps researchers tie traditional human resource theories like role behavior to the strategic posture of firms" (Snell, 1992: 292).

However, by placing emphasis on *role behaviors*, and on the connections between behaviors and organizational outcomes (low-cost, standardized products, or differentiated, unique products), the behavioral perspective does not seem to tell the whole story concerning how competitive advantage is sustained. The behavioral perspective is externally oriented; according to such a view, individual and organizational behavior and outcomes are largely determined by external environmental conditions (or stimuli), and human volition and internal cognitive processes, though sufficient, are not necessary for understanding how organizational outcomes are generated (Nord, 1969; Skinner, 1971). Moreover, because the role behaviors of employees are observable and transferrable from one organizational setting to another, they may be easily duplicated, and, thus, may not confer an enduring competitive advantage to any one firm. Parenthetically, researchers of human resource management have recently moved away from a Skinnerian-type behavioral paradigm and toward embracing cognitive processes in recruitment and selection, job analysis, training and development, performance appraisal, and compensation. Strategic human resource management research has, however, largely espoused the behavioral paradigm (Jackson, Schuler, & Rivero, 1989; Schuler & Jackson, 1987; Schuler & MacMillan, 1984). Given the current recognition among strategic management researchers and practitioners that sustained competitive advantage arises more from a firm's internal resource endowments and resource deployments that are imperfectly imitable than from the firm's product-market position (Barney, 1991; Conner, 1991; Grant, 1991), an examination of the role that the HR system plays in facilitating or stifling the development of such organizational competencies is warranted.

After reviewing the related literature on the resource-based view, we explore, within a systems perspective, the organizational competencies that may be sources of sustained competitive advantage. We then discuss how HR systems facilitate the development and utilization of organizational competencies and how HR systems can destroy these competencies or inhibit their exploitation. For the purposes of this article, a *human resource (HR) system* is defined as a set of distinct but interrelated activities, functions, and processes that are directed at attracting, developing, and maintaining (or disposing of) a firm's human resources. We offer propositions to guide future theory development and research in the area of strategic human resource management.

Two key assumptions underpin our analysis of the contribution of HR systems to sustained competitive advantage. First, we assume an open systems view and examine the extent to which HR systems contribute to the development of managerial, input-based, transformational, and output-based competencies, and, conversely, we examine how HR systems can destroy those competencies and/or inhibit their accumulation and deployment. Second, we subscribe to the view that managers are as much responsible for their organization's success as they are for its failure (Castanias & Helfat, 1991; Penrose, 1959; Reed & DeFillippi, 1990). Thus, we examine the extent to which HR managers and professionals can enable or constrain the strategic decision-making process by providing or withholding critical information concerning people-related business issues.

### THE RESOURCE-BASED VIEW OF STRATEGIC MANAGEMENT

Within the resource-based framework, the firm is viewed as a nexus of resources and capabilities that are not freely bought and sold in the spot market (Conner, 1991; Rumelt, 1987; Wernerfelt, 1984). To the extent that these firm-specific resources and capabilities yield economic benefits that cannot be perfectly duplicated through competitors' actions, they may be potent sources of sustained competitive advantage (Amit & Schoemaker, 1993; Barney, 1991, 1992; Dierickx & Cool, 1989; Reed & DeFillippi, 1990).

A firm's resources encompass all input factors—both tangible and intangible, human and nonhuman—that are owned or controlled by the firm and that enter into the production of goods and services to satisfy human wants (Amit & Schoemaker, 1993). Organizational capabilities characterize the dynamic, nonfinite mechanisms that enable the firm to acquire, develop, and deploy its resources to achieve superior performance relative to other firms (Dierickx & Cool, 1989). Capabilities are dependent upon the firm's capacity to generate, exchange, and utilize the information needed to achieve desired organizational outcomes through the firm's human resources (Amit & Schoemaker, 1993). Among the organizational capabilities that have been posited as potent sources of sustainable competitive advantage are *organizational culture* (Barney,

1986a; Fiol, 1991), *learning* (Fiol & Lyles, 1985; Teece et al., 1990), *routines* (Nelson & Winter, 1982), and *entrepreneurship* (Nelson, 1991; Rumelt, 1987; Schumpeter, 1934).

Resources and capabilities have been labeled *distinctive competence* (Fiol, 1991; Reed & DeFillippi, 1990; Selznick, 1957), *core competence* (Prahalad & Hamel, 1990), *firm-specific competencies* (Pavitt, 1991), *organizational capabilities* (Stalk, Evans, & Shulman, 1992; Ulrich & Lake, 1990), and *organizational capital* (Prescott & Visscher, 1980; Ranson, 1987; Tomer, 1987), reflecting a wide range of research objectives and theoretical perspectives. For the purposes of this article, *organizational competencies* describe firm-specific resources and capabilities that enable the organization to develop, choose, and implement value-enhancing strategies. Organizational competencies include all firm-specific assets, knowledge, skills, and capabilities embedded in the organization's structure, technology, processes, and interpersonal (and intergroup) relationships.

A fundamental premise of the resource-based view is that organizational competencies that are *heterogeneous* and *immobile* form the basis of sustained competitive advantage. Organizational competencies are heterogeneous when they are unevenly distributed and deployed across firms within a given competitive environment; differences in competency endowments and competency deployments account for differences in the size distribution and competitive positions of firms (Conner, 1991; Rumelt, 1984). Barney (1991) argued that in order for heterogeneous competencies to generate competitive advantage, they must satisfy at least two conditions: (a) the competencies must be valuable, enabling the firm to exploit opportunities and/or neutralize threats in the competitive environment and (b) only a small number of firms in a particular competitive environment possess these competencies.

In addition, organizational competencies must be relatively immobile in order to confer durable economic benefits to the firm. Competencies are immobile to the extent that they cannot be transferred easily from one firm to another. For example, organizational culture (Barney, 1986a), organizational routines (Nelson & Winter, 1982), and a firm's reputation and image (Weigelt & Camerer, 1988) may not be perfectly transferred across organizational settings. Immobility arises from organizational phenomena that inhibit duplication of economic benefits associated with the organizational competencies. These firm attributes or *isolation mechanisms* (Rumelt, 1984) include unique historical conditions (Barney, 1991), socially complex interactions, as in the case of team productions (Amit & Schoemaker, 1993; Reed & DeFillippi, 1990), specialized assets (Teece, 1987; Williamson, 1985), tacit knowledge and skills (Polanyi, 1967; Reed & DeFillippi, 1990), and *causal ambiguity* (Lippman & Rumelt, 1982), or the relative difficulty in establishing causal connections between organizational competencies and outcomes. Furthermore, organizational competencies must have no close substitutes in order to confer durable

economic benefits to the firm (Barney, 1991; Dierickx & Cool, 1989). As Dierickx and Cool (1989: 1509) pointed out, the existence of substitutes for a given stock of organizational competencies "threatens to render the original asset stocks obsolete, typically because they no longer create value to the buyer."

## ORGANIZATIONAL COMPETENCIES

### Managerial Competencies

Broadly conceived, managerial competencies include (a) the unique capabilities of the organization's strategic leaders to articulate a strategic vision, communicate the vision throughout the organization, and empower organizational members to realize that vision (Westley & Mintzberg, 1989) and (b) the unique ability to enact a beneficial firm-environment relationship (Hambrick & Mason, 1984; Tushman & Romanelli, 1985). These managerial competency attributes, because they determine the acquisition, development, and deployment of organizational resources, the conversion of these resources into valuable products and services, and the delivery of value to organizational stakeholders, can be potent sources of managerial rents, and, thus, sustained competitive advantage (Castanias & Helfat, 1991; Lado et al., 1992).

**Articulating a strategic vision.** Strategy researchers have argued that a firm with a well-articulated strategic vision potentially will achieve sustained competitive advantage over those that lack such a vision (Hamel & Prahalad, 1989; Prahalad & Bettis, 1986; Prahalad & Hamel, 1990; Westley & Mintzberg, 1989). Strategic vision provides a cognitive map (Weick, 1979) that supplies the underlying logic for combining, deploying, and mobilizing resources within the firm and among the organization's strategic business units (Prahalad & Bettis, 1986), and focuses and channels organizational competencies toward effective accomplishment of organizational goals (Westley & Mintzberg, 1989). Because strategic vision is inherently tacit (it is not based on codifiable recipes of success), is specific to an organization's unique historical context, and is socially constructed through complex interactions among the organization's key actors, it may yield sustained competitive advantage.

**Enacting organizational environment.** As systems of shared meanings (Morgan, 1986), organizations, through their managers, constantly act upon, cognitively interpret, and select their own environments (Smircich & Stubbart, 1985; Weick, 1979). Proponents of this view eschew an objective environment that exists independent of an organization, subscribing instead to the notion that organization and environment are enacted through the collective action of the top-management team, the collective interpretation and assignment of meaning to those actions, and the selection and retention of those actions that make sense to the organizational members (Daft & Weick, 1984; Morgan, 1986; Smircich & Stubbart, 1985; Weick, 1979). Because the enactment process is idiosyncratic

(i.e., it involves the generation and interpretation of firm-specific, symbolic knowledge); imaginative (i.e., it involves the search for strategic possibilities through intuition, experimentation, and improvisation); and evolutionary (i.e., it involves divergent and convergent processes of variation, selection, and retention of human actions and cognitions, linking past actions with future organizational realities), it may hold the potential of sustained competitive advantage.

### **Input-Based Competencies**

Input-based competencies encompass the physical resources, organizational capital resources, human resources, knowledge, skills, and capabilities that enable a firm's transformational processes to create and deliver products and services that are valued by customers (Lado et al., 1992). Strategy researchers argue that achieving sustained competitive advantage depends upon the firm's ability to *utilize* existing stocks of resources and its ability to *accumulate* new resource stocks more efficiently and effectively relative to competitors (Mahoney & Pandian, 1992; Penrose, 1959; Prahalad & Hamel, 1990; Wernerfelt, 1984). Input-based competencies both influence and are influenced by managerial vision (Prahalad & Bettis, 1986; Prahalad & Hamel, 1990), "shape the scope and direction of the search for knowledge" (Penrose, 1959: 77), and provide the proverbial grist to the organizational mill for creating and delivering value to customers.

**Exploiting imperfections in the labor market.** In markets or industries in which firms have different expectations about the future value of strategic resources, there exists a potential to earn above-normal returns from the acquisition and deployment of those resources (Barney, 1986b). A firm whose employees have unique abilities, knowledge, and foresight to make an accurate assessment of a strategic resource's rent-earning potential may achieve superior economic benefits relative to those firms that lack such unique abilities, knowledge, or foresight (Alchian & Demsetz, 1972; Barney, 1986b). According to Barney (1986b), given information asymmetries in the strategic factor markets, a firm whose members have unique skills and capabilities and/or are lucky may earn superior returns by purchasing undervalued resources and using these resources to implement strategy, or by not buying overvalued resources.

**Creating an internal labor market.** Internal labor markets emerge to facilitate the exchange and utilization of human resources that are firm specific (human asset specificity) and that are difficult to evaluate or monitor (Williamson, 1981; Williamson, Wachter, & Harris, 1975). *Human asset specificity* refers to the unique knowledge, skills, and abilities (KSAs) learned on the job. Because such competencies entail nontrivial replacement costs, there exists an economic rationale for their continued utilization in current employment. When the economic contribution of these firm-specific KSAs cannot be readily assessed quantitatively, internal (hierarchical) mechanisms are presumably superior to the external or

“spot” market in facilitating the efficient allocation and utilization of such resources. Williamson and colleagues (1975) maintained that internal labor markets (ILMs), by engendering collective bargaining (which places emphasis on objective task characteristics rather than on the subjective, idiosyncratic knowledge, skills, and abilities of workers as the basis for determining wage structure), serve to reduce workers’ proclivity to behave opportunistically (i.e., to seek self-interest with guile). Also, by permitting the renegotiation of employment contracts and enabling the resolution of employment-related disputes via arbitration, ILMs can economize on the bounded rationality of the managers and workers. Furthermore, by emphasizing a system of internal promotion to fill higher level positions, ILMs can create imitation barriers and, thus, can inhibit duplication of human resource-based advantages.

**Investing in firm-specific human capital.** If the labor market were purely competitive such that human resources were homogeneous and freely mobile across firms, a market-determined wage rate would provide all the information needed to attract, retain, or replace human resources in the organization. In this case, an investment in firm-specific human capital (i.e., the set of knowledge, skills, and abilities that are embedded in the firm’s human resources) through the firm’s HR policies and practices would not be economically warranted. The incremental cost of the human capital arising from the various HR activities (e.g., recruitment and selection, performance appraisal, training, and compensation) would exceed the incremental revenue product of employees (Joll, McKenna, McNabb, & Shorey, 1983; Steffy & Maurer, 1988). Thus, human resources and HR systems would conceivably not yield competitive advantage for the firm. In reality, however, firms face a heterogeneous demand for and supply of human resources, reflecting differences in the distribution of the knowledge, skills, and abilities across individuals, and variances in their productive capacities (Wright & Snell, 1991). Firm-specific human capital is valuable because it potentially enhances the productive capacity of human resources (Becker, 1975; Parnes, 1984), it is not widely available in the external labor market (Dierickx & Cool, 1989; Doeringer & Piore, 1971), and it cannot be readily substituted by other resources without having to incur heavy replacement costs (Barney, 1991; Williamson, 1981).

### **Transformational Competencies**

Transformation-based competencies describe “organizational capabilities required to advantageously convert inputs into outputs” (Lado et al., 1992: 85). These capabilities include innovation and entrepreneurship, organizational culture, and organizational learning.

**Harnessing innovation and entrepreneurship.** Decades ago, Schumpeter (1934, 1942) recognized that innovation and entrepreneurship constituted the crux of the capitalist economic system. In his view, sustained economic development was possible only when firms engaged in a

process of "creative destruction," referring to the carrying out of new combinations of resources, methods, systems, and processes to generate new products and services that effectively fulfilled actual and potential needs of customers (Schumpeter, 1934). Applying this view to strategic management, Barney (1986c), Rumelt (1987), Nelson (1991), and Nelson and Winter (1982), among others, have argued that firms that possess the unique resources, skills, and capabilities needed to generate Schumpeterian revolutions in the industry and/or that possess the unique abilities to rapidly adapt to these revolutionary changes can earn and sustain supranormal returns relative to firms that lack these competencies. Entrepreneurial talents are rare (Leibenstein, 1987), are cultivated and nurtured over a long period of time, and are embedded in a firm's historical context (owing, in part, to the unique values of the organizational founders; Schein, 1983). Because they provide the impetus for resource mobilization and deployment, entrepreneurial skills are a nonsubstitutable strategic asset.

**Fostering organizational learning.** Learning takes place when, for a given work-related stimulus, employees respond in different and qualitatively better ways from their responses to similar stimuli in the past (Bower & Hilgard, 1981). To the extent that such responses lead to reduced variability in the employee's performance over time or result in increased gains in productivity, learning is economically efficient (March, 1991). Over time, the individual develops a deeper understanding of specific tasks, duties, and responsibilities required of his or her job and hones the KSAs needed to perform the job in a dexterous and cost-effective manner. Through this learning-by-repetition approach, the behavioral actions and responses of organizational members may eventually coalesce into a distinct set of organizational routines (Nelson & Winter, 1982). This pattern of learning has been variously referred to as *single-loop learning* (Argyris & Schön, 1978), *lower level learning* (Fiol & Lyles, 1985), and *behavioral-level learning* (Duncan, 1974). It enables organizational members to detect performance deviations and make incremental adjustments to achieve congruence with preestablished levels of organizational performance.

*Double-loop learning* (Argyris & Schön, 1978), in contrast, characterizes a nontraditional organizational learning approach (Weick, 1979, 1991). This approach permits organizational members to question and reassess the relevance of existing performance standards, work norms, and underlying assumptions and beliefs (Morgan, 1986). It encourages organizational members to improvise and tinker with new ideas, to question and reflect on their actions, and to make sense of and generate new understandings from those actions (Weick, 1979). This learning-by-improvisation-and-reflection approach may generate tacit organizational knowledge through socially complex interactions among organizational members. Double-loop learning also may enhance organizational flexibility by enabling members to think and respond divergently to changes



in the internal and external work environment. The upshot is that compared to single-loop learning, double-loop learning holds a greater potential of sustained competitive advantage.

**Promoting organizational culture.** Strategy researchers have recognized organizational culture as a rent-yielding strategic resource that potentially generates sustainable competitive advantage (Barney, 1986a; Fiol, 1991; Schoemaker, 1990). Accordingly, organizational culture may enhance firm profitability by reducing the uncertainty and ambiguity inherent in strategic decisions and actions (Jones, 1983; Wilkins & Ouchi, 1983). Further, by articulating a set of broad, tacit rules and values that serve to unify and regulate the behavior and actions of organizational members (Camerer & Vepsalainen, 1988), organizational culture may reduce the transaction costs entailed in the management of human resources (Williamson, 1981). Organizational culture also may serve to unleash the valuable leadership talents and time that would otherwise be expended in coordinating work and controlling employee effort to achieve desired organizational outcomes (Schein, 1985). Barney (1986a, 1992) argued that an organizational culture can be the source of sustained competitive advantage insofar as it is valuable, rare, imperfectly imitable, and nonsubstitutable.

Morgan (1986) identified two salient roles of organizational culture that bear significantly on organizational efficiency and effectiveness: *rule following* and *enactment*. In a culture based on rule following, the emphasis is placed on establishing a set of cultural rules or social norms to which every organizational member is expected to adhere in order to attain organizational efficiency, stability, and predictability. Similar to the "invisible hand" notion of economic and natural selection, organizational cultural rules constitute powerful disciplinary and selective forces on human conduct, "selecting in' or reinforcing the values and behaviors associated with success and 'selecting out' or extinguishing those values and behaviors that are deemed peripheral, unsuccessful, or unimportant" (Miller, 1993: 122).

An enactment-based view of organizational culture maintains that organizational members are capable of proactively creating, shaping, and responding to their organizational cultural values and norms. These cultural values and norms are created and recreated through the variation-selection-retention process of "artificial selection" so aptly described by Weick (1979). Accordingly, organizational members proactively generate cultural variation through experimentation and improvisation, develop cognitive frames for selecting in and retaining successful cultural norms and selecting out unsuccessful ones. Thus, the enactment view of organizational culture suggests that organizations evolve into complex systems of shared meanings "that rest as much in the heads and minds of their members as they do in concrete sets of rules and relations" (Morgan, 1986: 131).

### Output-Based Competencies

Output-based competencies include all knowledge-based, invisible strategic assets, such as corporate reputation or image, product or service quality, and customer loyalty. Because these competencies entail large amounts of firm-specific investments of financial, technological, human, and organizational resources that are developed over a considerable period of time and are not freely tradeable, they can generate future streams of economic returns and, thus, be potent sources of sustained competitive advantage (Barney, 1986a, 1991; Dierickx & Cool, 1989; Lado et al., 1992; Weigelt & Camerer, 1988). These competencies are interrelated; corporate reputation or image arises from a firm's dedication to creating and delivering products and services of superior quality and for which customers are willing to pay a price premium (Shapiro, 1982; Weigelt & Camerer, 1988). The rents from the superior product/service quality, in turn, motivate the firm to invest in quality-enhancing systems for creating and delivering value to customers (Shapiro, 1983). Given a critical core of loyal customers (secured over time through dedication to quality offerings), the firm may continue to reap superior economic benefits for a sustained period of time. Further, these output-based competencies may serve to signal efficient and effective utilization of organizational resources, making the firm attractive to prospective customers, employees, shareholders, and other stakeholders who may be willing to increase their supply of resources and KSAs in expectation of higher returns on their investments (March & Simon, 1958).

To the extent that a firm's HR systems can facilitate the development and exploitation of the organizational competency attributes discussed previously, the firm may achieve sustained competitive advantage. By contrast, a firm with HR systems that destroy organizational competencies and/or prevent the exploitation of competencies may be at a competitive disadvantage. A discussion of competence-enhancing and competence-destroying HR systems follows.

### COMPETENCE-ENHANCING VERSUS COMPETENCE-DESTROYING HUMAN RESOURCE SYSTEMS

#### Competence-Enhancing HR Systems

**Utilization/development of managerial competencies.** In addition to its traditional role of communicating top-management's strategic vision to employees and facilitating their understanding and interpretation of that vision (Evans, 1986), HR management can play a key role in the articulation of strategic vision, in the formation of organizational capital, and in the enactment of beneficial firm-environment alignment. Researchers (e.g., Schilit & Locke, 1982) have documented how middle managers (including HR managers) can have an influence on key strategic decisions. According to Dutton and Ashford (1993), middle managers can

be instrumental in selling strategic issues by prompting top management to attend to issues that they might otherwise overlook. Middle managers can contribute to the articulation of an organization's strategic agenda (mission or vision) and initiate appropriate action. Following this logic, HR managers and professionals, by championing HR-related business issues at the top-management echelon (Schuler, 1990), can be instrumental in the formation and realization of strategic vision/mission. Some of the most admired American corporations have placed human resource issues at the center of their strategic mission and vision (Schuler, 1990; Ulrich & Lake, 1991). According to Schuler (1990), the role of the HR function in these companies reflects a transformation from one that *mainly* serves as an "employee advocate" to one that serves as an advocate of people-related business issues at the strategic apex of the organization. In this role, HR managers and professionals, with their unique information and insight regarding human resource issues, may be effective in bringing to the surface top management's assumptions underlying the strategic planning (and human resource planning) process (Mitroff & Emshoff, 1979).

Additionally, HR managers and professionals can exert upward influence on top management through synthesizing information and knowledge about how productive their employees can be (Floyd & Woodridge, 1992). An organization's HR system can be viewed as a repository of knowledge about firm-specific knowledge, skills, abilities, relationships, and the work-related values of its employees. Such knowledge, which labor economists refer to as *organizational capital* (Prescott & Visscher, 1980; Tomer, 1987), is specific to the organization's technology, structure, and processes, is socially generated through interactions among human resource professionals and line managers, and is embedded in the firm's unique history. To the extent that such knowledge enables members of the firm to attract, develop, and retain employees with competencies that surpass those of competitors, it may contribute to sustained competitive advantage. Prescott and Visscher (1980) have shown analytically how organizational capital can enhance organizational productivity (and profitability) by enabling the firm to determine (a) the suitability of employees for particular tasks, (b) the compatibility of employees' attributes with those of others in a work team, and (c) the adequacy of employees' KSAs for attaining overall organizational purposes and goals. Thus, by generating and synthesizing "ambiguous and diverse data" (Floyd & Woodridge, 1992) about employees' KSAs and interpreting this information within their organizational contexts, HR managers may affect top managers' perceptions about people-related business issues and may contribute to the formation of "organizational capital."

HR managers and professionals also may contribute to the development and utilization of managerial competencies through their participation in "strategic conversations" (Westley, 1990). Because they serve as an important strategic node in the communication of information between

top management and the rank and file (Nonaka, 1988), HR managers are uniquely suited to categorize strategic human resource issues as opportunities and threats, which is a necessary step in the strategy-formation process (Dutton & Jackson, 1987).

**Acquisition and mobilization of input-based competencies.** HR systems can contribute to the mobilization and utilization of input-based organizational competencies through a number of ways, including hiring employees for the organization as a whole (Bowen, Ledford, & Nathan, 1991), exploiting imperfections in the external labor market, developing efficient internal labor markets (e.g., Williamson et al., 1975), and fostering the formation of firm-specific human capital (Becker, 1975).

Research on strategic selection and staffing (Gerstein & Reisman, 1983; Olian & Rynes, 1984) suggests that organizations whose hiring practices engender a good match (or fit) between the characteristics of managers and the requirements of organizational strategy will likely achieve superior performance compared to firms whose selection practices do not emphasize manager-strategy fit (Gupta & Govindarajan, 1986). Correspondingly, a holistic approach to personnel selection, emphasizing the alignment of the "whole" person (rather than KSAs) and the whole organization (rather than the requirements of a specific job) has been suggested (e.g., Bowen et al., 1991; Chatman, 1989). Such an approach allows for a comprehensive assessment of the organization's work content and context, on the one hand, and the knowledge, skills, abilities, and work-related values and beliefs of prospective employees, on the other. Arguably, such a selection approach may enhance organizational competence formation and utilization insofar as it attracts employees with KSAs that surpass those required by their immediate jobs (Bowen et al., 1991) and engenders an effective alignment between the values of the focal employee and the pivotal values and cultural norms of the organization (Chatman, 1989; Wiener, 1988).

Exploiting imperfections in the external labor market represents another way in which HR systems can contribute to input-based competencies. Greer and Ireland (1992) have posited that a firm that is able to stockpile human resources during periods of economic downturn for use in the future will likely achieve competitive advantage over competitors whose hiring practices are consistent with the state of the economy. During downturns, human resource competencies are likely to be undervalued in the market, with the converse being true in the case of upturns in economic activity. Greer and Ireland's empirical findings lend support to their "contrarian" model of human resource investment strategy: "Companies having strong financial performance conduct more extensive hiring during downturns than do weaker performers" (1992: 979). The higher performing companies tend, among other things, to emphasize human resource planning and to maintain a regular age distribution of its workforce. Because the strategy of countercyclical hiring involves higher costs

than a procyclical strategy (Greer & Ireland, 1992), firms that are able to achieve better cost-benefit trade-offs can earn superior returns during the long run.

The creation of an internal labor market is accomplished by hiring employees from the external labor market to fill lower level jobs, or "ports of entry" (Doeringer & Piore, 1971; Williamson et al., 1975). If the firm hires employees at ports of entry and then upgrades the competency of their workers through on-the-job training, "teaching-by-doing," and socialization, an internal labor market may protect the firm against misrepresentation of competency levels by job applicants (Williamson et al., 1975: 274).

A serendipitous strategy of job design (Miner, 1987) also may potentially enhance the development and utilization of employees' talents in the workplace. This strategy entails the creation of jobs around the unique experience, knowledge, skills, interests, and abilities of current employees, or the creation of jobs around the unique knowledge, experience, skills, and interests of newly hired employees (Miner, 1987). Jovanovic (1979a) argued that because they reflect a rare person-job fit (in order to determine the quality of the match, one would have to experience the job!), idiosyncratic jobs may result in higher employee productivity. Further, because idiosyncratic jobs entail large investments in specific assets, both on the part of the organization and the employee, turnover would be too costly for both parties. A low probability of employee turnover may induce greater investments in firm-specific human capital (by both the employee and the organization) to maintain the quality of the person-job match (Jovanovic, 1979b). Idiosyncratic jobs also may provide the organization with the flexibility and adaptability needed to take advantage of emergent opportunities and to neutralize unforeseen threats in the environment (Miner, 1987).

To the extent that human resource functions, such as selection and socialization (Wanous, 1992), organizational staffing (Olian & Rynes, 1984), developmental performance appraisal (Latham & Wexley, 1991; Meyer, 1991), on-the-job training (Becker, 1975; Wexley & Latham, 1991), and skill-based pay (Lawler, 1992), constitute an investment in firm-specific human capital, they may be potent sources of sustained competitive advantage. Empirical research (MacDuffie & Kochan, 1991; Snell & Dean, 1992) provided support for the contention that investment in firm-specific human capital can generate competitive advantage and long-run organizational performance. MacDuffie and Kochan (1991) found that firms with high levels of investment in employee training exhibited higher productivity levels compared to firms with low levels of such investments. Similarly, Snell and Dean's (1992) findings suggested that firms that emphasized investments in specific human capital through selective staffing, comprehensive training, developmental performance appraisal, and equitable compensation were more likely to be successful

in implementing advanced manufacturing technologies and total quality management systems than firms that did not emphasize such investments.

**Development/utilization of transformational competencies.** A firm's human resource system can contribute to these transformation-based competencies to the extent that it plays a significant role in harnessing innovation and entrepreneurship, fostering organizational learning, and promoting an innovation-based organizational culture.

Research rooted in the "behavioral perspective" (e.g., Schuler, 1986; Schuler & Jackson, 1987) has shown how HR systems can foster and facilitate innovation and entrepreneurship through eliciting and reinforcing employee role behaviors, such as creativity and innovation, a long-term orientation, cooperation and trust, risk taking, and tolerance of ambiguity. Accordingly, an HR strategy would emphasize idiosyncratic and interdependent jobs, participative decision making and problem solving, group-based work assignments, individual performance appraisal, specific compensation, and broad career paths. Further, Kazanjian and Drazin (1986) argued that human resource managers can contribute to effective implementation of technological innovations by, among other things, providing employees with a strong vision, linking idea generators with sturdy pillars (employees who serve as custodians of the existing knowledge base of the firm), and championing employees' creative and innovative ideas to top management.

The HR system also may foster and facilitate the accumulation of organizational knowledge. Such knowledge is generated through several processes, including socialization, articulation, combination, and internalization (Nonaka, 1991; Wanous, 1992). Socialization enables new employees to learn about the tacit knowledge and capabilities that are deeply embedded in the organization's systems, routines, and culture. The socialization process also allows for the discovery and exchange of tacit personal knowledge between newly hired employees and incumbent employees. Through the use of models, symbols, analogies, metaphors, and other tools of "objectification" (Schultz & Luckman, 1985), tacit personal knowledge is transformed into objective organizational knowledge. To the extent that the combination of existing and new knowledge results in new (or improved) products and improved value production and delivery systems, it is integrated into the organization's routines. Such a knowledge-generation process may enhance both the organization's and the individual's capacities for acquiring, processing, and interpreting new information and knowledge in the future.

**Developing and exploiting output-based competencies.** HR systems may facilitate the development and utilization of output-based organizational competencies through eliciting employee involvement and commitment to the firm, fostering idiosyncratic exchanges between the firm's internal and external stakeholders, and building a positive organizational reputation. Walton (1985) identified the salient characteristics of a

commitment-based HR system that distinguish it from the control-based HR system associated with bureaucratic firms. Accordingly, an HR system characterized by, among other things, broad, flexible jobs, team-based production and incentive systems, multiple career ladders, and heightened investment in human capital through training and development of employees, may engender greater commitment of organizational members.

A commitment-based HR system may engender idiosyncratic exchanges of particularistic and symbolic resources (e.g., status, task- or firm-specific KSAs, and trust) among organizational stakeholders (Foa & Foa, 1980; Griesinger, 1990). Unlike material resources (e.g., money and goods that can be monetized) whose value depends on market forces of demand and supply, particularistic and symbolic resources derive meaning and significance from the specific (idiosyncratic) and reciprocal nature of the exchange between the parties involved. Further, whereas economic resources (e.g., money and goods) yield zero-sum gains to the exchange parties, particularistic and symbolic resources generate positive-sum gains for both parties to the exchange (Greisinger, 1990; Macneil, 1986). Thus, HR systems characterized by idiosyncratic jobs (Miner, 1987), selection and socialization designed to enhance person-organization fit (Chatman, 1991), team-based production and compensation, and developmental performance appraisal (Latham & Wexley, 1991; Murphy & Cleveland, 1991) can be effective in engendering reciprocal exchanges between the firm (managers/owners) and workers. In turn, these HR systems may engender idiosyncratic and reciprocal exchanges between the organization's employees and its customers, suppliers, and other external stakeholders.

### **Competence-Destroying HR Systems**

**Inhibiting managerial competencies.** The type of HR philosophy guiding HR policies, functions, and practices may constitute a deterrence to the development of organizational competencies. Dyer and Holder (1988) have identified three types of HR management philosophy: utilization, facilitation, and accumulation. In contrast to facilitation and accumulation, through which organization members take a long-term view and emphasize the attraction, development, and retention of employees with KSAs that are relevant for the organization as a whole, utilization represents a minimalist philosophy whose proponents emphasize achieving short-term gains and operational efficiencies through HR practices, such as employee selection based on KSA-job (rather than person-organization) fit, employment-at-will, individually based incentives, minimum training and development of employees, and turnover/layoff (Dyer & Holder, 1988). Although such an HR philosophy may bring about employee compliance, it may fail to generate employee commitment to the organization.

HR managers and professionals may be focused too narrowly on HR issues to contribute effectively to the formation and implementation of the

organization's strategic vision/objectives. Trapped by "functional myopia" (Bounds & Pace, 1991), they may fail to "see" the organizational forest for the HR trees and, thus, may hinder the development of the core competencies needed to conceive of, choose, and implement the organization's strategy.

**Inhibiting/destroying input-based competencies.** A firm's HR system may prevent the development of input-based competencies to the extent that its recruitment and selection system results in the hiring of individuals who do not possess the requisite firm-specific KSAs, and/or the selection of individuals whose values and beliefs are incongruent with the organization's values and beliefs. In labor markets in which prospective employees know more about the quality of their KSAs than do prospective employers, the possibility exists for such individuals to misrepresent their KSAs to the employer; consequently, the firm may end up hiring employees with KSAs that are analogous to Akerlof's (1970) "lemons." According to Akerlof's (1970) lemons principle, in markets characterized by information asymmetries, wherein the potential for negative opportunism exists, bad products (lemons) will drive out good ones because sellers of the good products are unable to derive optimum value from the sale of their products. Information asymmetries (and, correspondingly, the odds for hiring lemons) are greatest for firm-specific KSAs because the firm may not fully determine the quality of the KSAs until *after* the individual is hired and assigned to a particular job and after he or she works for a significant length of time in the organization (i.e., firm-specific KSAs are subject to experience and credence qualities; cf. Nayyar, 1990). The retention of incompetent employees (lemons) also may threaten the internal labor market; "plateaued" employees may drive out highly talented employees because the latter might not derive the full value of their human capital investments.

Alternatively, a person may possess the requisite KSAs for a particular job, but he or she may have values and beliefs that are incongruent with the pivotal values, norms, and beliefs of the organization. As Argyris (1957) noted decades ago, the lack of congruence between the values and needs of the competent, self-actualized person and the values and requirements of the (bureaucratic) organization may induce feelings of alienation, frustration, dissonance, and apathy, and it may engender distrust between the employee and the firm. HR managers may resort to the use of "legalistic remedies" (Sitkin & Roth, 1993), such as formal rules and hierarchical authority and control systems, which, in turn, may generate greater distrust. Consequently, the individual might perform only to the "letter" of the employment contract, withholding effort (Kidwell & Bennett, 1993) or refusing to display helping or organizational citizenship behaviors (Bateman & Organ, 1983). At the limit, the despondent employee might go on a rampage, sabotage workflow, or quit the organization.

**Inhibiting/destroying transformational competencies.** An HR system that focuses on standardization of work operations through task special-



ization, task formalization, and work routinization through job design, written rules, and standard operating procedures may inhibit the development of transformational competencies by promoting and reinforcing organizational "defensive routines" (Argyris, 1986). According to Argyris (1986), defensive routines (organizationally sanctioned behaviors for avoiding threats, contradictions, or surprises) are reinforced when HR managers and professionals design programs that contain ambiguous and inconsistent messages, when these managers deny or ignore the ambiguity and inconsistency inherent in those programs, when they make the ambiguity and inconsistency undiscussable and this "undiscussability" also undiscussable. Consequently, employees may engage in routine behaviors that perpetuate the status quo, such as the tendency for organizational members to change the justifications for poor performance rather than to improve their performance (Cangolesi & Dill, 1965; Starbuck, 1983).

Additionally, Martinko and Gardner (1982) showed how HR system characteristics (such as rules, policies, and procedures), performance appraisal systems, reward systems and task structure, and task difficulty can engender "learned helplessness" (the tendency for persons to become passive, apathetic, and powerless after experiencing a series of frustrations or failures). The upshot is that such a state of motivational and performance deficit can impede or even destroy the firm's capacity to develop and utilize its core competencies.

Ethically ambivalent HR systems also may frustrate the capacity of organizational members to develop and exploit the organizational competencies (Jansen & Von Glinow, 1985; Kerr, 1975). An HR system is ethically ambivalent when it elicits and reinforces behaviors, values, and norms that are contradictory to and inconsistent with the espoused behaviors, values, and norms of organizational stakeholders (Jansen & Von Glinow, 1985). For example "fouled-up reward systems" (Kerr, 1975) (a) that reinforce one set of desirable behaviors (e.g., teaching) when another set of behaviors is expected (e.g., research), (b) that reward undesirable behaviors (e.g., "apple polishing" and "politicking"), and/or (c) that penalize and extinguish behaviors that are deemed critical to organizational success (e.g., innovation, risk taking, and long-term orientation) may generate cognitive dissonance and heighten workers' feelings of alienation, apathy, and resentment.

Consequently, employees might engage in behaviors (e.g., lying, subterfuge, and stonewalling) that involve the distortion and concealment of valuable information. In turn, management may respond by tightening its grip on employees through the use of more stringent monitoring and control devices. This spiral of actions and reactions (or counteractions) by managers and employees can lead to the destruction of organizational competencies.

**Inhibiting/destroying output-based competencies.** In their efforts to gain credibility from top management and to justify the contribution of HR

programs to overall organizational effectiveness, HR managers and researchers have highly emphasized quantification of HR-related outcomes. Guided by models, such as utility analysis (Cascio, 1982, 1987; Steffy & Maurer, 1988) and human resource accounting (Boudreau & Berger, 1985; Cascio, 1982; Cascio & Ramos, 1986; Landy & Farr, 1983; Landy, Farr, & Jacobs, 1982), HR managers have focused on collecting and analyzing "hard data" on employee performance in order to ascertain the economic benefits and costs associated with the attraction, development, and maintenance of human resources. Even though such efforts are important, HR managers and professionals may be trapped by what Drucker (1974) referred to as a "paralysis-by-analysis" syndrome. Managers may become enmeshed in a "numbers game," designing HR measurement systems (e.g., performance appraisals) that overemphasize individual performance without regard for systems factors (Deming, 1986; Dobbins, Cardy, & Carson, 1991). When quantification becomes an end in itself, managers may fail to detect threats to performance validity stemming from criterion deficiency (omitting relevant performance criteria) or criterion contamination (including and measuring irrelevant factors) (Cascio, 1987). Such fouled-up measurement systems may, in turn, generate feelings of inequity, alienation, and resentment among employees, leading to their low organizational commitment and a high amount of employee turnover (Abelson & Baysinger, 1984).

Furthermore, a control-oriented approach to HR management (Walton, 1985), which emphasizes the simplification and routinization of work, the use of rules and standard operating procedures, and the use of hierarchical authority to achieve coordination and control of operations, may contribute to the attainment of the goals of a bureaucratic organization (e.g., stability, predictability, and efficiency). These achievements notwithstanding, such an HR system also may lead to the development of core organizational rigidities (Leonard-Barton, 1992), to what Gouldner (1954) referred to as "rule tropism" (or the tendency for employees to do things strictly "by the book"), and to de-skilling and demoralization of employees (Kanter, 1986; Morgan, 1986). According to Morgan (1986), mechanistic approaches (such as control-based HR strategy) may produce dysfunctional effects, including the dehumanization of employees, and they may cause organizational members to pursue their own self-interests at the expense of organizational goals.

### PROPOSITIONS

In the preceding sections, we have discussed how HR systems can enhance the development and/or utilization of organizational competencies, on the one hand, and how HR systems can destroy organizational competencies and/or constrain their development and utilization, on the other. Although we do not claim that the HR function is the only way that the organizational competencies can be developed and exploited, we submit the following proposition concerning the relative competitive

position of firms with competence-enhancing HR system attributes vis-à-vis those with competence-destroying HR system characteristics.

*Proposition 1: Firms with HR systems that facilitate the development and exploitation of managerial, input-based, transformational, and output-based organizational competencies will have a greater likelihood of achieving competitive advantages than firms that have HR systems that destroy these competencies and/or prevent their exploitation.*

Organizational competencies must be continually replenished, upgraded, and deployed in order for the firm to gain and keep a competitive advantage (Amit & Schoemaker, 1993; Porter, 1985; Ranson, 1987; Reed & DeFillippi, 1990; Stalk et al., 1992). As previously discussed, organizational competencies may be expanded, upgraded, and maintained through HR systems that emphasize hiring employees for the organization as a whole (Bowen et al., 1991), extensive socialization of newly hired employees (Wanous, 1992), developmental performance appraisal (Latham & Wexley, 1991; Murphy & Cleveland, 1991), skill-based compensation strategy (Lawler, 1992), and comprehensive training and development to provide new KSAs, which are needed to achieve long-run productivity (Wexley & Latham, 1991). Conversely, organizational competencies can depreciate through, among other things, lack of value congruence between the focal employee and the organization (Argyris, 1957), ethically ambivalent human resource practices (Jansen & Von Glinow, 1985), assignment of employees to jobs with low perceived significance and meaningfulness (Hackman & Oldham, 1976), and other organizationally induced physical and emotional problems of employees (Odiorne, 1984).

However, the use of competence-enhancing HR systems, although necessary for a firm to gain a competitive position, may not be sufficient for it to achieve *sustained competitive advantage*. If firms with competence-destroying (or constraining) HR practices can duplicate the HR practices that facilitate the development and/or utilization of competencies in order to improve their competitive position, then the competence-enhancing HR practices may not be sources of sustained competitive advantage. Therefore, in order to generate sustained competitive advantage, the HR system attributes themselves must be relatively immobile (i.e., not easily transferrable across firms), causally ambiguous, or both. Alternatively, the configuration of the HR system attributes must be unique, synergistic, and/or causally ambiguous. If, as the practitioner literature (e.g., O'Toole, 1985; Peters & Waterman, 1982) seems to suggest, discrete, competence-enhancing HR practices can be transferred across firms, and if, as models of utility analysis and human resource accounting imply, precise causal linkages between these HR practices and organizational outcomes can be established, then these disjunctive HR practices may not yield *sustained competitive advantage*.

Even if these practices can be duplicated, the combination of these HR practices may depend on the particular strategic objective and other specific attributes of the firm. Further, the configuration of these HR practices may generate positive synergies and engender complex interactions among the KSAs of the firm's employees and other organizational resources, which may deter imitability by competitors. Thus, the sustainability of HR-based competitive advantage may depend on the nature of the configuration of the HR system attributes. More specifically,

*Proposition 2: Firms with configurations of competence-enhancing HR system attributes that are unique, causally ambiguous, and synergistic will have sustained competitive advantage over firms that have HR system configurations that are typical, causally determinate, and nonsynergistic.*

Additionally, the sustainability of an HR-based competitive advantage may depend on the nature of the configuration between the HR system and the firm's strategic "suprasystem" (Golden & Ramanujam, 1985; Lengnick-Hall & Lengnick-Hall, 1988). Lengnick-Hall and Lengnick-Hall (1988: 468) posited that firms with HR systems that are reciprocally integrated with their strategic suprasystems will likely achieve superior long-run performance relative to firms that either lack such an integration or "that manage human resources primarily as a means to solve competitive issues." HR systems in the latter firms are sequentially linked to organizational strategic systems. In keeping with Thompson's ideas (1967), we believe that reciprocal integration fosters close, informal interactions among human resource managers (or professionals), other functional managers, and top managers. Such an arrangement facilitates the generation and exchange of tacit knowledge for the formulation and implementation of an organizational strategy that reflects HR issues and an HR strategy that reflects the firm's overall strategic direction. Furthermore, the reciprocal integration may increase the flexibility that the firm needs to adapt to rapidly changing environmental conditions. In contrast, when the HR system is either sequentially linked to or decoupled from the strategic suprasystem, its capacity for environmental enactment (Weick, 1979) and information generation (Floyd & Woodridge, 1992) may be constrained. Thus,

*Proposition 3: Firms with HR systems that are reciprocally integrated with their strategic suprasystems will be more effective in the development and exploitation of organizational competencies (and, thus, in achieving sustained competitive advantage) relative to firms with HR systems that are either sequentially linked to or decoupled from their strategic suprasystems.*

Furthermore, the sustainability of HR-based competitive advantage may depend on the nature of the HR processes entailed in the accumula-

tion, development, and deployment of organizational competencies. Organizational processes may be oriented toward maintaining the status quo (self-maintaining processes) or toward achieving developmental transformation (self-renewing processes). Self-maintaining processes, or what Maruyama (1963) has called *morphostatic processes*, rely on negative feedback to reduce any deviation between actual and desired organizational performance. Self-renewing, or *morphogenetic processes*, in contrast, characterize processes in "open systems" that rely on positive feedback to amplify the deviation between actual and expected performance. Nonaka's (1988) "creativity-centered" model of HRM describes a self-renewing or morphogenetic process, whereas his "productivity-centered" model typifies a self-maintaining or morphostatic system. According to Nonaka, those people using the creative HRM model can engender developmental transformation in an organization by harnessing the imagination, volition, and commitment of their employees. By contrast, the productivity-centered HRM model focuses on cost minimization through the efficient execution of the traditional personnel functions, such as wage administration, grievance handling, and so forth (Mahoney & Deckop, 1986). Such an HRM model is oriented at reducing the variance in employees' performance through job simplification and close monitoring and control. Thus,

*Proposition 4: Firms with self-renewing HR processes will more likely generate competencies at a higher rate (and, thus, will more likely achieve sustained competitive advantage) than firms with HR processes that are self-maintaining.*

### CONCLUSION

Drawing on the theoretical insights of the resource-based view, in this article, we have attempted to show both how HR systems may contribute to sustained competitive advantage by facilitating the development and utilization of organizational competencies and how HR systems may be the source of competitive vulnerability by contributing to the destruction of organizational competencies and/or preventing the utilization of those competencies. Specifically, we have discussed, within an open-systems framework, how HR activities, functions, and processes may contribute to the development and utilization of managerial, input-based, transformational, and output-based competencies and how HR systems can destroy and/or impede the development and utilization of such competencies.

By emphasizing processes for developing and utilizing firm-specific, causally ambiguous KSAs, our competency-based view compliments and extends the behavioral perspective of strategic HRM, which has emphasized observable and transferrable role behavior of employees as the basis for creating competitive advantage (e.g., Schuler & Jackson, 1987). To the extent that the configuration of the competency-enhancing HR

activities, functions, and processes depends on the unique and idiosyncratic capabilities for "carrying out new combinations" (Schumpeter, 1934), and insofar as such a configuration produces positive synergies for the firm, it may hold the potential of sustained competitive advantage.

We realize that conditions in the firm's external and internal environment may enable or constrain the capacity of HR systems to develop and exploit organizational competencies. One of the most pervasive environmental influences on HR systems has been the increasing government legislation and regulation of employment practices. Though such legislation and regulation are designed to further societal goals, protect employee rights, and ensure fairness in employment practices, it may engender a "legalistic" mindset that may paradoxically inhibit organizational flexibility and proactiveness. As noted by Sitkin and Bies (1993), when decisions are made in firms with an overriding concern for legality and avoidance of potential litigation, other important decision criteria (e.g., efficiency and predictive validity) may be overlooked. Thus, legalistic organizations may increase control mechanisms, formal policies, and adoption of legal procedures as "culturally acceptable" (Sitkin & Bies, 1993: 349). Such an organizational culture, in which members are bound by fear and avoidance of legal entanglements, may use the system to mask biases (Moore & Haas, 1993) or to justify the actions serving powerful members. Employees in such organizational cultures may perceive less discretionary power, less "shared sense of values," and an increasing distrust of the organization (Sitkin & Roth, 1993). When an organization's culture promotes a "litigation mentality" (Bies & Tyler, 1993) such that members' attempts at achieving fairness become a mountain of rules focused on both reporting and measurable outcomes, the interpersonal exchanges required for implementing procedures and for the production of trust and other tacit, knowledge-based resources may not receive enough attention.

Achieving a sustainable competitive advantage through firm-specific competencies will require continuous monitoring by the firm because competency patterns may change over time. The technique of "strategic assumption surfacing and testing" (Mitroff & Emshoff, 1979), which incorporates a dialectical process, may be useful for monitoring and assessing the desired competency profiles. Thus, managers may need to continuously question and reexamine their assumptions regarding what constitutes a distinctive competence for their firms.

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