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Human Resources Management Processes: A Value-Creating Source of Competitive Advantage

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HRM processes refer to the deeply-embedded, firm-specific, dynamic routines by which a firm attracts, socializes, trains, motivates, evaluates, and compensates its human resources. This perspective integrates economic considerations with contextual social legitimacy aspects. It provides new lenses on the tacit, and evolutionary aspects of HRM and the value it creates.

The recognition that the management of human resources plays a critical role in firm performance is a relatively recent development. Over the last century, the dominant view of the personnel function has evolved from a purely maintenance perspective (with an emphasis on controlling labor costs) to one that includes compliance (due to the increasing number of laws and regulations surrounding the employer–employee relationship). However, two decades of restructuring (mergers, acquisitions, downsizing and rapid growth in some sectors) coupled with intense global competition has led management to re-evaluate the cost-control and compliance roles of the human resources management (HRM) function. Managers are now asking whether and how HRM can add economic value. Organizations are assessing the potential role of HRM in reaching organizational goals and in realizing their market strategies.

Two paradigms in the literature describe the contribution of HRM to firm performance. The first assigns value to a firm's stock of human-capital as a way of measuring the contribution of human resources to firm performance (Stewart, 1997). Although organizations recognize that by the year 2000, 85 per cent of all jobs in North America will be knowledge-based (Quinn *et al.*, 1996), this knowledge asset is not formally recognized in balance sheets of organizational assets. The human-capital advocates in this first paradigm attempt to formalize, capture and leverage this asset (intellectual capital) to produce a higher-valued product (Stewart, 1997).

The second branch attempts to identify 'best practices' (Becker and Gerhart, 1996; Huselid, 1995; Koch and Gunter-McGrath, 1996). Researchers in this movement specify and measure the bundles or typologies of HRM practices associated with high-performance or labor productivity. The basic idea is that companies improve performance by copying others' practices. The imitator can benefit only from the codified elements of the practices that are being copied; the path that led to the development of the practice at the innovator firm cannot be duplicated.

This article introduces a new perspective on the contribution of HRM to a firm's financial performance. The 'process' perspective of HRM developed here, which is anchored in both the resource-based view of the firm and in institutional theory, links the human-capital and best-practices paradigms discussed above. It focuses on the unique ways in which organizations draw on past experiences, current cul-

ture, and social norms to marshal its human resources to execute market strategies. Moreover, it builds on the organizational capital perspective, which views systems as ways to capture and deploy human-capital. This paper explains how adapting a 'process' perspective of HRM leads to the conclusion that an organization's ability to build, deploy, and renew its productive human-capital through transformational routines in ways that cannot be easily replicated by other organizations generates a competitive advantage in the market.

The paper is organized as follows: the next section provides the theoretical foundations of the process view of HRM. The section begins with a discussion of the resource-based theory and institutional theory that form the basis of the HRM process view developed here. The section proceeds with comparisons between the HRM process perspective and the human-capital and HRM best practices perspectives. This is followed by the theory development and an articulation of the sources of value creation that are embedded in the HRM process perspective. The final section discusses the implications of the process perspective of HRM for both theory and practice.

Theory Development

Resource-Based View (RBV) Theory

Resource-Based View (RBV) theory is anchored in the notion that a firm's resources and capabilities are heterogeneous. It is this heterogeneity that explains variability in performance across firms within an industry (Amit and Schoemaker, 1993; Peteraf, 1993; Barney, 1991). A firm's resources are stocks of transferable input factors owned or controlled by the firm. Examples of input factors include tradeable 'know-how', financial and physical assets, and human-capital. 'Capabilities' refers to a firm's ability to deploy and coordinate its resources to reach a desired end. Capabilities are information-based, tangible and intangible firm-specific decision-making patterns (routines) that an organization develops through experience. Capabilities thus refer to the mechanisms used by firms to develop, combine, deploy and protect resources to convert them into outputs. Dynamic capabilities reflect the organization's capacity to draw on its past experiences to renew, reconfigure, and integrate new processes to remain competitive in a changing market environment (Teece *et al.*, 1997).

The firm-specific, tangible and intangible, resources and capabilities that bestow a company's competitive advantage are its 'strategic assets' (Amit and Schoemaker, 1993). Strategic assets are the resources and capabilities that enable the firm to realize superior economic performance (i.e. capture economic rents), and are thus subject to imitation by other firms. For a firm to sustain its superior profitability, it must create isolating mechanisms (Rumelt, 1984). That is, the firm must make it difficult for other firms to gain access to similar strategic assets. Valuable strategic assets have the following properties: they enable the execution of a firm's market strategy, and thereby enhance revenue and/or reduce costs, are difficult to trade or imitate (i.e. are subject to market failures), are worth more in combination with other capabilities than in isolation, are rare, are robust and get better with use, and are not substitutable with other capabilities (Amit and Schoemaker, 1993).

Institutional Theory

Whereas the resource-based view of HRM centers on economic issues, the institutional perspective focuses on the social context, values, and norms within which an organization functions. Decision-making in the institutional framework is influenced by social legitimacy concerns rather than by concerns of profit maximization (Oliver, 1997, 1996, 1991; Zukin and DiMaggio, 1990). The institutional perspective centers on institutionalized organizational behaviors, and on the cultural persistence and endurance of such stable repetitive and enduring activities (Oliver, 1992). The justification for managerial activities, such as the allocation of resources, is either taken for granted or justified by the culture of the firm, and is not necessarily based on economic or financial reasoning. Activities and decisions thus become institutionalized by the habits, norms, and traditions of the firm. This paradigm suggests that the regulatory environment and the social context within which an organization exists contribute to homogeneity among firms since decision-makers are driven by the need for external conformity and acceptance. Oliver (1997) introduces the concept of 'normative rationality,' which refers to the justification of managerial choices on the basis of historical precedent and social norms. Managers in an institutional framework are bound by social judgment, historical limitations, and inertia.

The Process View of HRM

Rooted in a firm's culture and social norms, yet strategically-oriented, HRM processes are deeply-embedded, firm-specific, dynamic mechanisms by which a firm attracts, socializes, trains, motivates, evaluates, and compensates its human resources. These processes encompass an ordered set of coordinated and complimentary activities as well as the information exchange and decision-making procedures for changing them; they integrate economic and normative rationality. HRM processes lead to enhanced productivity and strategic flexibility, which, in turn, create value and enable the firm to carry out its chosen market strategy. Consider a hypothetical firm that produces and successfully markets computers. The 'process' by which the firm produces and markets computers is more than the sum of the individual

'practices' involved. The firm may have developed a successful training program for employees, for example. It is of limited value to a competitor to copy this training program without an understanding of the evolutionary path that led to its development, its internal alignment with other managerial processes, and the external alignment with the firm's market strategy. Furthermore, it is difficult to copy all elements of a practice as some elements may be tacit and not codifiable. Context is critical.

The firm-specific HRM processes are established by developing and exchanging information throughout an entire organization. This process, sometimes called 'organizational learning,' creates, transfers, and institutionalizes knowledge, which increases an organization's adaptability (Snell *et al.*, 1996). This implies that the organizational HRM processes within a firm are evolutionary, i.e. continuously evolving and adapting by drawing on past experiences to refine the effectiveness of processes and to meet the changing needs of the organization. Consider again the computer firm introduced above. The training program for employees is not static. Rather, the program will evolve as new information about the effectiveness of previous programs becomes available (i.e. as the firm gains experience and learns what works). As well, the training program evolves with the firm's changing market strategy.

Human resources are not 'owned' by the firm and can thus not be bought and sold like physical capital

There are no substitutes for a firm's HRM processes, which are continuously refined to better fit a firm's strategy. Furthermore, the processes are more valuable to a firm's shareholders when deployed in conjunction with other organizational processes in product development, customer service, etc. Indeed, the firm's HRM processes become one of its strategic assets (Amit and Schoemaker, 1993) as they enable the firm to realize superior profitability. The value of this asset stems in part from its being based on organization-specific past experience and therefore not easily or cheaply reproduced by other firms.

The HRM process perspective captures dimensions of management that foster the establishment and continuation of a firm's competitive advantage that the 'best practices' and 'human-capital' perspectives cannot. Since processes are firm-specific, their value in some next-best alternative use is low. The cost of developing them will thus not be reflected in the market. As well, because the processes are indivisible, it is impossible for individuals to capture their value in some other context. Unlike human-capital services, for which there is a market, the market for processes is more tenuous. This is not the case with 'best practices' since they may be codified to a large extent and thus generally transferable. HRM processes change over time as a result of internal organizational experience and feedback from the market on their effectiveness. The next two sections elaborate on the differences between the HRM process view and the human-capital and best-practices views.

HRM Processes Versus Human-Capital Perspectives

As Coff (1997) observed, the human-capital of a firm is often viewed as a strategic asset. Human-capital has advantageous attributes distinct from the attributes of other assets. The first is that it grows with use. The learning and application of new knowledge leads to even greater knowledge, as well as to a motivation to acquire more. Intellectual capital can be shared without being depleted. In fact, sharing results in increased feedback, acquisition of new knowledge, and modifications and adjustments to current knowledge. However, the problems associated with formally valuing human-capital are complex and often intractable.

Human-capital also has other characteristics distinct from the attributes of other assets, such as physical capital. Human resources are not 'owned' by the firm and can thus not be bought and sold like physical capital. Rather, the firms hire the services of its employees who, if they so choose, can quit the firm and relocate at a competing firm. As well, employees have the ability to continually extract a higher portion of the wealth they create by asking for higher compensation. They have the ability to defy authority or channel energies in directions inconsistent with the firm's overall direction. Coff (1997) labels the problems associated with these characteristics the 'turnover' and 'information' problems.

The process view of HRM that we propose, in contrast to the human-capital perspective, maintains that the processes used to create human-capital remain with the firm, even if individuals leave. In other words, the processes used by the firm to attract, train, motivate, retain and replace human resources are not threatened by the turnover of workers. The human-capital approach is an output perspective; ours is a process perspective. Our approach builds on Becker *et al.* (1997); Coff (1997) and Stewart (1997), who describe human-capital dilemmas and prescribe capture and retention strategies. The human-capital approach to human resources management highlights the role of capital stock and is essentially a static view. In this perspective, the knowledge and skills of workers can become obsolete if external factors render a firm's products or services obsolete. Furthermore, a firm may decide to pursue different strategies, thus diminishing the value of its current human assets.

Our view is that it is not the specific knowledge (stock) of the firm that results in sustainable competitive advantage. Rather, it is the ongoing, dynamic organizational HRM process that renews and adjusts the ways in which the firm selects, trains, socializes, evaluates and compensates, its human-capital that enable a firm to effectively execute its strategy (flow). People come and go, processes stay and improve in the firm. The HRM process is the engine of renewal used to transform new employees. HRM processes are about how things are done, not what is produced. The HRM process perspective sees as its goal the firm-specific mechanisms that produce a broad range of human capabilities (knowledge, skills, flexibility, and attitudes such as motivation and commitment) to facilitate strategy implementation.

By viewing the HRM role as a way to build productive human-capital capable of strategy implementation, we capture the firm-specific and dynamic nature of such processes. We focus on the ways to create and deploy the firm's human-capital such that the competitive advantage of the firm is enhanced.

HRM Processes Versus HRM Practices Perspectives

Traditional perspectives view the management of human resources as a collection of practices, policies, and underlying philosophies (Jackson and Schuler, 1995). The goals of these inter-related practices are to attract, develop, assess, maintain, and retain an organization's human assets (Lado and Wilson, 1994).

An HRM practice is a specific activity, such as using a selection test to differentiate between the attributes of many candidates. Organizations may bundle practices, such as selection tests, orientation programs, and incentives with the goal of selecting and motivating productive employees. However, these human resource practices (or activities) may not be internally consistent or aligned with corporate strategy. In other words, they may lack fit with each other and with corporate objectives and action plans. Indeed, recent research (Becker *et al.*, 1997; Capelli and Crocker-Hefter, 1996) recognizes that a universal set of best practices cannot be advocated in light of the need for internal alignment (with other HRM practices) and, more importantly, alignment with the firm's market strategy.

Institutional theory suggests that organizations adopt codified best practices for social legitimacy reasons believing that this will lead to enhanced organizational effectiveness, and thereby economic advantages. However, the universal adoption of these practices leads to firm homogeneity which, in turn, reduces a firm's competitive advantage.

HRM processes are more than a collection of activities or best practices. HRM processes are firm-specific ordered and coordinated transformational mechanisms that enable information exchange and decision-making. The HRM process view captures past experiences, yet is forward looking in that it allows progression along an evolutionary path consistent with the firm's stated goals. This is at the heart of HRM processes, and is not captured by the practice perspective. Industry insiders are well aware of companies that use not only high quality inputs but have a reputation for high quality HRM processes. McKinsey & Co., which provides management consulting services to companies, has a unique process for training its management consultants. Procter and Gamble, known for its high quality brand names in packaged consumer products, also has a reputation as an academy, producing brand managers. Both these companies have recognized that their profitability critically depends on their internal HRM processes that have been difficult for competitors to imitate.

Becker *et al.* (1997) provide empirical support for aligning HRM best practices with a firm's market strategy. However, their focus is on identifying 'high-performance work systems' to build human-capital rather than on the dynamic, path dependent, and tacit processes leading to a productive, flexible, and creative workforce.

HRM processes are not mindless repetitions of certain practices. They are a set of possible choices, a sequence of actions, enabled and constrained by organizational and cognitive structures (Pentland and Reuter, 1994). The glue that holds these together is the shared vision of an organization's strategy. Indeed, an organization's strategy may be influenced by the types of competencies it already possesses (Capelli and Crocker-Hefter, 1996). For example, if the human resources department has excelled in its ability to attract, hire, orient and train new employees rapidly for fast-growing corporate ventures, then a firm can more easily consider corporate venturing as a strategic option.

A process focuses not on what a firm does, but on how it is done. The 'how' is a decision-making pattern embedded in a firm's culture. The HRM practices approach lists prescriptions in isolation; the HRM process perspective views activities as parts of a larger process characterized by goal orientation, coordination, and information exchange. It is about how these activities are coordinated and combined (Teece *et al.*, 1997) and the evolutionary paths taken to achieve these organizational routines. As Koch and Gunter-McGrath (1996) observe, routines are patterns of behavior within an organization that are difficult to imitate, cumulative (build upon one another in a path dependent way), continuous, and goal-directed. HRM processes focus on the decision-making patterns and the norms and values that the organization has. An HRM process is a dynamic organism that is constantly evolving.

The comparison of the three perspectives discussed thus far (human-capital; best practices and HRM processes) is summarized in Table 1.

The Value of HRM Processes

The process theory of HRM captures critical dimensions of the resource-based and institutional theories (Amit and Schoemaker, 1993; Barney, 1986, 1991; Peteraf, 1993; Oliver, 1991, 1996, 1997). Throughout our description of HRM processes, we have alluded to their value-creation potential. In this section, we explicitly describe the principal characteristics of HRM processes that render them valuable (i.e. that enhance a firm's economic performance by enabling it to either increase revenues and/or decrease costs). These characteristics include: tacitness, coordinated and complimentary, learning, path dependency, robustness, non-substitutability, and rarity.

Tacitness. Since HRM processes are dynamic rather than static, some of their most valuable aspects are embedded in the tacit knowledge of the organization. Hence, they become hard to imitate, or otherwise trade. The dimensions that are subject to imitation become obsolete quickly. Tacit knowledge takes two forms. The first is knowledge in a form that is extractable because, with questioning, activities can be codified. Within organizations, a shared language and the economies of a common code facilitate transferability. However, transfer of this type of tacit knowledge to other organizations is impeded by a lack of a shared language across organizations. Thus, even though this type of tacit knowledge is transferable in theory, transfer may be limited in practice. Furthermore, the investment needed to codify and transmit all relevant knowledge may be prohibitively high, and as will be shown, the information is often dated by the time the code is copied. Also, while the codes can be copied, the context in which it is seeded may not be fertile. The tacitness of the firm's HRM processes increases the cost of imitation, and makes them less desirable to competitors.

The second form of tacit knowledge is 'mindless' information, i.e. routines so well-practiced that they are automatic and thus difficult to extract. Employees may not be conscious of task routines if they rely on procedural memory to complete them. It may then be difficult to articulate processes (Cohen and Bacdayan, 1994). These routines then remain with the organization in which they were developed (Koch and Gunter-McGrath, 1996).

Unlike benchmarking and copying best practices (i.e. transferring codified knowledge), the tacit knowledge embedded in a firm's HRM processes cannot be copied or bought. The tacitness dimension of processes, which makes the transfer of processes among firms difficult, preserves the heterogeneity of firms, and hence the value-creation potential of processes.

Coordinated and complimentary. Researchers in the area of organizational theory espouse the idea that organizational success is a function of the degree of fit between organizational variables, such as structure, and technology (Woodward, 1965; Burns and

Table 1 Comparison of Perspectives

Dimension	Human capital	Best practices	HRM process
Transferability	Yes. Employees are able to move from firm to firm.	Incomplete. Based on copying codified aspects of rivals. The evolutionary path that led to the best practice cannot be copied. Value of transferability is thus limited.	No. Very limited due to tacitness.
Complementarity	No	Incomplete. Present when copying a system of HR best practices but linkage with other organizational processes is ambiguous.	Yes. Complete.
Dynamic	No. Focuses on existing stock.	No	Yes. Focuses on flow, renewal, learning from past experiences, preparing for the future.
Rarity	No. In general, services can be rented. Trained and experienced human capital may be firm specific.	No. Transferable to some extent.	Yes. HRM processes are unique and entirely firm specific.
Substitutability	Yes (for capital).	Yes. There are many practices to choose from.	No
Conformity	No	Yes. Social conformity.	Yes. Integrate social legitimacy with economic reasoning.
Path Dependency	Yes	No. Focus is on what is currently done and choosing 'best' option.	Yes. Reflects past organizational experience and learning.

Stalker, 1961; Rowe and Wright, 1997). In the present article, 'fit' refers to internally consistent practices in HRM. Rumelt (1984) observed that the strategic firm is epitomized by a bundle of linked and idiosyncratic resources and resource-transformation activities. Huselid (1995) demonstrated that organizations that bundle HRM practices achieve superior returns. The various operations that form part of the HRM processes reinforce each other and enable strategy.

The transformation of inputs into more valuable outputs relies on the coordination of processes along three lines: alignment of processes with strategy; fit across HRM functional areas, and fit within HRM functional areas.

Consider a company that continuously leads the market in new product development, and selects job candidates for their ability to learn. Employees are then taught to value and use learning through culture management. They are given many learning opportunities, are evaluated for learning acquired and implemented and compensated for the achievement of goals related to the use of new knowledge and their ability to transfer that knowledge into new products. Each activity within the sub-process reinforces other activities. For example, pre-training activities (such as discussions with the supervisor about gaps in performance) are coupled with post-training activities (i.e. setting performance goals after the course) (Saks and Belcourt, 1997; Belcourt and Wright, 1995). The collective decision-making ability embedded in this type of process cannot be emulated.

Learning. HRM processes evolve to meet the changing needs of particular organizations. At the individual level, learning is a process that results in more effective job performance. Learning is characterized by not only the acquisition of new skills, but also by the increased capacity to learn more, and to recognize learning opportunities. At the organizational level, these advantages increase exponentially. Organizational learning is about information exchanges and how the members of the organization make use of these exchanges. Cultures (involving coded language, common patterns, and routines) are developed through these information exchanges, thus increasing tacitness and decreasing opportunities for trade or transfer.

In Schumpeterian fashion, the creative destruction of HRM processes results in more adept processes. New processes are created internally through experience, experiments, and accidents, and externally through joint ventures or acquisitions, the hiring of new employees with new skills, networking, and the acquisition of research-based knowledge.

These processes benefit from practice, through which they become more refined, more productive, and hence more valuable because they become more effective in enabling the strategy of the firm. The ability to learn and update processes faster than competitors is critical to maintaining the competitive advantage of the firm. The process must allow for continual updating and evolution to enhance the fit between a firm's market strategy and its internal management system. In that sense, we view the HRM processes as enabling strategy.

Path dependency. HRM processes build upon past experiences by reinforcing those activities that work and eliminating those that lead to failures. The effect of past investments in human resource activities and the emergence of successful routines constrain the ability of competitors to copy. These routines are complex and causally ambiguous (Reed and De Fillipi, 1990). Competitors who attempt to copy a firm's HRM processes will face substantial time compression diseconomies (Dierickx and Cool, 1989.).

Robustness. A principal advantage of HRM processes is their robustness. While grounded in the firm's culture and social norms, they incorporate damage attenuation and absorption capabilities. This makes them less vulnerable to catastrophic accidents (Perrow, 1986). These processes permit flexibility and responsiveness to changing conditions, which engenders the evolution of more appropriate processes. No individual is of critical importance to the process; and if one individual leaves the firm, the process remains behind. Processes are flexible and are changing through learning. They become more robust with use as the organizational experience grows.

Non-substitutability. To the extent that imitating a firm's HRM processes is costly and time consuming, rivals might attempt to find substitutes for HRM processes. Yet, these may not be available, and outsourcing this capability may not be cheaper or revenue enhancing.

Rarity. The most valuable HRM processes are unique and firm-specific: as no other firm is likely to possess the same strategy-enabling mechanisms, revenues are likely to increase with the deployment of HRM processes that are configured to enable the firm to capture the opportunities it faces.

Although HRM processes are difficult to articulate and codify, they can be identified by the above characteristics. Processes that can be described by these characteristics are likely to be strategy-enabling and value enhancing.

Implications

The HRM process perspective offers a theory for understanding how the management of human resources can generate a competitive advantage. While it builds on recent work in HRM (Snell *et al.*,

1996; Becker *et al.*, 1997) it provides new lenses on the tacit, dynamic, and evolutionary aspects of HRM. Further, the process perspective of HRM integrates economic/financial considerations with contextual social legitimacy aspects.

Managers who understand the strategic role of HRM processes are able to make better use of resources (evidenced by higher productivity per worker) and are able to mobilize their resources to execute market strategies. Espousing the HRM process approach generates the recognition that the source of a firm's strategic assets is internal and firm-specific rather than external and generally applicable across firms. An understanding of the HRM process perspective enables managers to focus on aligning these processes with strategy while auditing their evolution to make them more effective. It forces management to make decisions about HRM for both internal and external alignment. The HRM process approach presented in this article provides a framework for appreciating the role of HRM in firm performance, and may facilitate the development of guidelines to inform managers. As well, the process perspective on HRM opens the doors for a wide range of field and empirical studies, both cross sectional and longitudinal, which hold the promise of providing value creating insights on the composition, evolution, and role of HRM processes.

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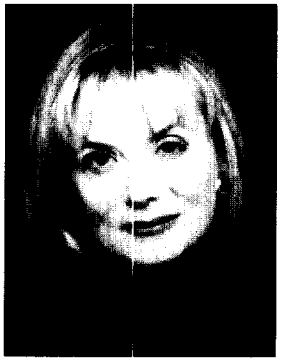

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