



# RADICAL HRM INNOVATION AND COMPETITIVE ADVANTAGE: THE *MONEYBALL* STORY

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*Moneyball* (Lewis, 2003), a New York Times bestseller, is a book about baseball. When read through a broader lens, however, *Moneyball* is also a book about innovation, resistance to change, competitive advantage, achieving excellence, and, of most relevance here, human resource management. While many would agree that the radical innovation described in *Moneyball* represents a "new vision of management" in baseball, this article describes how *Moneyball* lessons might contribute to a "new vision of HRM" in various types of organizations. The focus of the article is on what HR executives and scholars can learn from the *Moneyball* phenomenon. More specifically, the authors address a number of questions related to the *Moneyball* story that have relevance to successfully implementing HRM innovations; these questions have to do with overcoming resistance to the implementation of radical innovation and how HRM innovation can contribute to sustainable competitive advantage. © 2006 Wiley Periodicals, Inc.

**H**ow is it that *Moneyball* (Lewis, 2003), a book seemingly about baseball, was among the *Economist's* Books of 2003 in the Economics & Business category, was a *New York Times* bestseller, is referenced in Larry Bossidy's most recent book (Bossidy & Charan, 2004), and motivated an argument in the *National Review* that American education would do well to adopt the rigorous analysis employed by Billy Beane, the gen-

eral manager of the Oakland Athletics (Lips, 2004)?

*Moneyball* is a book about baseball. When read through the lens of a management researcher, however, it is also a book about human resource management, innovation, resistance to change, competitive advantage, and achieving excellence. The focus of this article, therefore, will be on what HR executives and scholars can learn from the *Moneyball* phenomenon. While many would agree

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that the radical innovation (sabermetrics) described in *Moneyball* represents a “new vision of management” in baseball, this article describes how adopting a broader lens might contribute to a “new vision of HRM” in various types of organizations.<sup>1</sup>

First, a bit about the book. Lewis’s best-seller describes how Billy Beane revolutionized Major League Baseball (MLB) by demonstrating how maximizing efficiency can leverage limited resources to create a successful outcome. Bill James, author of the comprehensive *Historical Baseball Abstract* (2001), spent three decades challenging the national pastime’s conventional wisdom, applying rigorous statistical analysis (sabermetrics) to determine the traits most associated with a player’s true value to his team. James’s findings were inconsistent with most baseball experts’ opinions, and his research was ignored for years.

Until, that is, Billy Beane embraced sabermetrics and put it into practice. Beane maximized his team’s efficiency, focusing on players with the traits most important for winning ballgames, rather than those with impressive traditional statistics. The strategy worked: over the past five years, Beane’s Athletics have been near the top of the league’s standings despite being outspent by nearly all their competitors (Lips, 2004).

Outside the “Club” of baseball’s establishment, the level of interest in the ideas presented in the book has been considerable. The Oakland Athletics’ front office has

had calls from a cross-section of U.S. business and sports entities: teams from the NFL, NBA and NHL; Wall Street firms, Fortune 500 companies, and Hollywood studios. The people most certain they had nothing to learn from the book, however, were in the front offices of other major league teams (Lewis 2004). Lewis argues that “they were ‘a Club.’ In business if someone exposes the trade secrets of your most efficient competitor, you’re elated. Even if you have your doubts, you grab the book, peek inside, check it out. Not in baseball. In baseball many of Beane’s competitors were fu-

rious. In the Club there was no need to read the book, and, with the exception of several owners who took an interest, baseball executives bragged that they hadn’t read the book because, well, it was offensive” (Lewis, 2004).

*Moneyball* thus describes how Billy Beane revolutionized Major League Baseball by exploiting an inefficiency in the baseball labor market (i.e., the ability to get on base had been seriously undervalued). Beane exploited the inefficiency by implementing a radical human resource management innovation—an employee (player) performance measurement and feedback system that allowed him to field a highly competitive team while having one of the lowest payrolls in Major League Baseball. The purpose of this article is to investigate the *Moneyball* story to glean what lessons are contained therein for HR executives and scholars concerning innovation, resistance to change, and competitive advantage all within the context of human resource management. We address four questions related to the *Moneyball* story that have relevance to successfully implementing human resource management innovations: (1) why did it take so long for the sabermetrics innovation to be adopted? (2) how is it that Beane was successful in having sabermetrics implemented by the A’s? (3) does sabermetrics provide a competitive advantage, and if so, how? and (4) is the competitive advantage provided by sabermetrics sustainable?

In investigating each of the above questions, we discuss (a) current management literature related to the question; (b) how that literature plays out in the *Moneyball* story; and (c) implications for the HR executive. The article concludes with a general discussion of the relevance of the *Moneyball* story to HR executives. Prior to addressing these questions, we briefly describe the relevance of the *Moneyball* story in today’s HR context and the radical innovation at the center of *Moneyball*—sabermetrics.

## **Moneyball and the Current HR Context**

As firms face increasing global competition, rapid technological change, and a growing

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trend toward commoditization of product markets, they must find ways to better leverage their human capital (Wright & Snell, 2005). This requires a massive rethinking of the role of HR and a revolutionary approach to managing people in organizations. Unfortunately, a number of writers have found that HR functions serve as bureaucratic obstacles, rather than drivers of positive change in organizations (Hammonds, 2005; Losey, Meisinger, & Ulrich, 2005; Stewart, 1996).

While many authors bemoan the current state of HR, few present a coherent plan or vision for how to dramatically change the function. Such change requires radical innovations in how HR professionals design and implement processes aimed at building competitive advantage through people. These are changes that do not generally characterize HR functions. While one might look to company stories such as Continental Airlines (Carrig, 1997), or IBM (Gerstner, 2002) for ideas concerning how to drive organizational change, perhaps the story presented in *Moneyball* serves as an appropriate benchmark.

### **Sabermetrics: The Foundation of *Moneyball***

Sabermetrics refers to a statistically based approach for developing and applying objective knowledge to baseball. This statistical approach is an important determinant of player evaluation and of “in-game” tactics (e.g., bunting, stealing). The term derives from SABR, the acronym for the Society for American Baseball Research. Historically, assessing player talent favored future potential over past performance; sabermetrics, on the other hand, focuses on past performance as a predictor of future performance. While statistics (e.g., batting average [BA] and earned run average [ERA]) were used previous to its advent, sabermetrics has contributed different statistics, which it is argued, are better predictors of player contribution to team performance (e.g., on-base percentage plus slugging percentage [OPS]). In addition to player assessment and selection becoming oriented more toward performance, as opposed to potential,

and there being more of a focus on (new) statistics, certain in-game decisions (e.g., sacrifice bunts, stolen bases) are discouraged within a sabermetric approach. Although, in the traditional baseball view, these tactics are often associated with a team’s ability to “manufacture” runs by advancing a base runner, the sabermetric approach eschews game tactics that accept a very likely out to advance a runner without significantly increasing the probability of scoring runs (James, 1986; Katsunori, 2001; Lewis, 2003). That is, in-game decisions based on tradition or intuition give way to decisions based on statistical probability, which works against bunting and stealing.<sup>2</sup>

### **Sabermetrics and HR**

In essence, the sabermetrics approach described in *Moneyball* is relevant to issues corporations and HR functions confront. First, firms must develop a competitive strategy. Such a strategy should be consistent over time, providing a way to differentiate the firm from competitors while requiring appropriate tactical decisions made in response to industry and local conditions. Sabermetrics has resulted in strategic modifications in terms of human capital strategy and in-game, tactical decisions in baseball.

Second, firms must hire individuals to execute their strategy. These hiring decisions entail identifying relevant knowledges, skills, and abilities (KSAs) and then developing measures that validly assess those characteristics. Sabermetrics focused baseball’s attention on different KSAs than were previously considered relevant and then offered new ways of assessing those characteristics. It is these areas of overlap (i.e., modifications in human capital strategy, in tactical decisions, in relevant KSAs, and in KSA assessment) that make *Moneyball* an interesting example of how firms might exploit better information to build human capital strategies that result in competitive advantage. We argue that the les-

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sons gleaned from sabermetrics (as described in *Moneyball*) may provide unique insights into how firms might achieve competitive advantage, and it is in this context that we examine the questions that follow.

### Why Did It Take So Long for Sabermetrics to Be Adopted?

New statistics similar to those used in sabermetrics were proposed close to 50 years prior to the Athletics' adoption of sabermetrics in 2001. Bill James, author of the comprehensive Historical Baseball Abstract (James, 2001), spent three decades challenging the national pastime's conventional wisdom, applying rigorous statistical analysis to determine the traits most associated with a player's true value to his team. James's findings and his approach were ignored for years. In 1954, long before James's seminal work, Branch Rickey, then-general manager of the Pittsburgh Pirates, proposed a new statistical approach for assessing batting proficiency (Rickey's approach emphasized on-base percentage, as does sabermetrics). These early signals concerning new, potentially superior approaches for assessing player talent were ignored for decades. How might we explain that?

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### The Management of Innovation Literature

We turn to the management of innovation literature for insights concerning delays in implementing novel ideas. As argued in that literature, implementing organizational innovations is dependent upon an appreciation of the attributes of a focal innovation (Damanpour, 1991; Wolfe, 1995). Attributes that are most relevant to the adoption and implementation of HRM innovations are as follows:

- Uncertainty—lack of knowledge concerning the link between an innovation's inputs, processes, and outcomes;

- Organizational Focus—administrative versus technical—the aspect of the organization to which the innovation is most relevant;
- Radicalness—the extent to which an innovation is novel, represents change, and thus implies new behaviors;
- Magnitude—the extent of change to existing structure, personnel, and financial resources implied by an innovation; and
- Pervasiveness—the number of organizational members who are expected to change their behaviors due to the innovation (Wolfe, 1995).

While uncertainty is inherent to the implementation of most innovations (Kanter, 1988; Storey, 2004; Tushman & Nelson, 1990), given that they are intangible, administrative innovations, HRM innovations tend to be characterized by considerable uncertainty. Radicalness, magnitude, and pervasiveness can each contribute to the uncertainty that surrounds the implementation of an HRM innovation. Uncertainty, in turn, contributes to innovation resistance, which is often unrelated to the objective merit of an innovation, depending rather on the structural and personal consequences it implies.

In addition to an innovation's attributes, organizational context is an important determinant of innovation adoption and implementation (Damanpour, 1991). In tradition-bound organizations, strategic frames of reference, which had provided direction, often become blinders; established processes, which had provided efficiencies, become mindless routines; commitment to particular constituencies (e.g., employees, suppliers), which had provided resources, restricts flexibility; and values, which once unified and inspired, harden into rigid rules and regulations (Sull, 1999). Tradition-bound organizations thus are not prone to change, certainly not to radical innovation (Hamel, 1996; Miller, 1990) as "core capabilities" become "core rigidities" (Leonard-Barton, 1992). In tradition-bound institutions such as Major League Baseball (MLB), the frames of reference, established processes, constituency commitments, and restrictive values de-

scribed by Sull can interact in a manner that reinforces the status quo.

### *The Management of Innovation Literature and the Moneyball Story*

#### Tradition

Why would it be that MLB teams, wealthy and otherwise, would be resistant to adopting means of assessing talent that would result in paying less for a given level of talent? We suggest that one explanation lies in MLB being very tradition-bound and characterized by deep respect for convention and precedent. The past commissioner of MLB, Fay Vincent, expressed this powerfully and succinctly: "Baseball is all about memories" (Vincent, 2005).

MLB has a very rich history and strong tradition. Continuity and common experience are endemic in MLB. Since 1990, approximately 85% of field managers have had MLB playing experience. The remaining 15% have had significant minor league managerial, major league coaching, and/or front office experience (Holtz, 2005). Similarly, virtually all MLB coaches have considerable professional baseball backgrounds, and scouts are former professional players and/or have been trained by the MLB Scouting Bureau. Until the advent of sabermetrics, this was the case with front-office personnel (e.g., general managers, directors of baseball operations, scouting directors) as well.

Although certain aspects of baseball have changed over the years (e.g., the designated hitter rule, specifications concerning the ball, the height of the pitcher's mound), preferred player characteristics have remained constant. The desired attributes of position players focus on the "five tools" (hitting for average, hitting for power, fielding, foot speed, and arm strength) while those of pitchers focus on three factors (arm strength, number of pitches thrown, and control). "Make-up" (i.e., character, personality) attributes such as aggressiveness, instinct, dedication, and work ethic apply to both position players and pitchers. Until very recently, changes in the evaluation of potential talent have been due to techno-

logical advances and related improvements in the precision with which physical characteristics (e.g., running speed, arm strength) are measured, not in the characteristics that are assessed.

#### Resistance

The roles of the field manager and of the scout change dramatically with the adoption of sabermetrics. These changes imply serious challenges to the extant skills as well as to the job security of individuals in these roles. In MLB's conventional way of doing things, field managers have significant control over talent selection and over in-game tactics. This "field manager-centric" orientation, however, is inconsistent with full implementation of sabermetrics wherein the field managers have a greatly diminished role (e.g., in talent selection and in-game tactics that are based to a considerably greater extent on statistics). As described in *Moneyball*, Beane hired Art Howe as the Athletics' manager because he believed that Howe would follow the instructions of the front office.

Adopting sabermetrics also results in a dramatically decreased emphasis on professional discretion and an increased emphasis on statistics on the part of scouts and administrators responsible for evaluating and selecting talent. Moreover, these scouts and administrators are unlikely to have considerable training in statistics. The inherent routinization of sabermetrics means that making and implementing decisions becomes relatively simple, and the supply of people qualified to fill related roles becomes more abundant. Resistance to sabermetrics thus can be understood as the natural reaction to a radical innovation that challenges extant skills as well as job security. The following statements are indicative of this:

A lot of what scouts feel they do is based on gut instinct, their history of being in the game . . . their experience. They

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have a hard time quantifying it. . . . they see all these . . . charts and graphs . . . and maybe when you don't understand something, you feel a little challenged by it. (Gary Hughes, Chicago Cubs' assistant GM and MLB scout for 30 years, in Schwarz, 2005)

. . . the main adversarial thing is that some of our old-time guys are losing jobs that we didn't feel they should be losing. . . we correlate it to the fact that some of the computer stuff is causing that, and we resent it. (Eddie Bane, the California Angels' scouting director, in Schwarz, 2005)

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*HR has been criticized for its administrative bureaucracy, unwillingness to change, and inability to add value...*

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We see then that due to its tradition-bound nature, MLB has not been prone to change, certainly not to radical innovation. As argued above, in tradition-bound institutions such as MLB, frames of reference, established processes, constituency commitments, and values interact in a manner that reinforces the status quo. Moreover, the attributes of sabermetrics (i.e.,

it is a radical, administrative, pervasive innovation with considerable magnitude) create considerable uncertainty and resistance to its implementation. This uncertainty and resistance are exacerbated by the perceived threat of sabermetrics to extant job skill sets and to job security.

### ***Implications of the Moneyball Story for the HR Executive: Relating the HR Context to MLB***

While the context of HR varies considerably at the level of the organization (e.g., public vs. private, large vs. small, technology vs. manufacturing vs. service, etc.), the profession of HR in many ways resembles the tradition-bound nature of MLB. HR has been criticized for its administrative bureaucracy, unwillingness to change, and inability to add value from Drucker (1954) to Stewart (1996) to Hammonds (2005). While willing to occasionally chase after certain fads such

as T-groups or handwriting analysis, most HR professionals can be characterized as risk- and change-averse.

However, HR professionals are not alone in resisting to change to HR practices. Snell and Dean (1994) have noted that HR systems are notoriously intractable. Wright and Snell (1998) suggested that this stems in part from individual users' (e.g., HR's managerial clients) discomfort with changing their normal routines. For instance, despite significant research support for the superior validity of structured behavioral interviews over traditional unstructured interviews, many companies and interviewers continue to use the latter. In many cases, interviewers are unwilling to cede decision-making control to a formulaic score, preferring to use their intuition built up over years of experience.

While all firms seek to leverage their human capital as a competitive weapon, few seem to have done so successfully. The past few years have increasingly focused HR practitioners' attention on HR metrics (Becker, Huselid, & Ulrich, 2001; Fitz-Enz & Davison, 2001), but in large part these efforts have not led to developing better measures to assess previously identified phenomena or to making better use of existing measures. With the notable exception of the Sears story (Rucci, Kirn, & Quinn, 1998), efforts to develop HR metrics have seldom led to comprehensive questioning of either business tactics or human capital strategy. This omission stems from HR professionals tending to be tradition-bound and risk-averse (Hammonds, 2005) and from the fact that such a comprehensive, sabermetrics-type approach would be radical, of significant magnitude, quite pervasive, and, therefore, characterized by considerable uncertainty. We now return to the *Moneyball* story to see how sabermetrics was successfully implemented in spite of a similarly unfavorable context.

### **How Did Beane Successfully Implement Sabermetrics in the Oakland Athletics?**

As described earlier, MLB is a tradition-bound institution with what have become

limiting frames of reference, processes, and constituency commitments that interact in a manner that reinforces the status quo. Considerable force or energy would be necessary to counter these inertial forces. What was the force, or energy, that resulted in sabermetrics being adopted by the Oakland A's?

### *The Management of Innovation Literature: Overcoming Resistance*

Given the uncertainty surrounding most HRM innovations (HRMIs) and due to potential resistance, HRMI implementation is determined by a combination of the power of an innovation champion and by organizational context. The presence of an innovation champion—the individual who provides energy and momentum to the implementation process by advocating and promoting an innovation—is an important determinant of successful innovation implementation (Howell & Higgins, 1990). A champion's efforts are necessary to counter inherent organizational resistance to change; a new idea either finds a champion or dies (Schon, 1963, 1976). Predicting HRMI consequences is inherently uncertain, and the innovation's very existence can be threatening to vested interests, so such innovations tend to stimulate political activity (Johns, 1993). The relative power of organizational actors resolves such activity. While a champion is necessary to personify and make an administrative innovation tangible, his/her power is also necessary to counter threatened groups with necessary power and authority (Galbraith, 1982). A critical component of successful implementation of HRMIs, therefore, is the existence and power of an innovation champion (Wolfe, 1995).

In addition to the power of the innovation champion, organizational context is an important determinant of HRMI implementation. These two innovation determinants—champion power and organizational context—interact in HRMI implementation such that one can compensate for the other (Wolfe, 1995). The more congruent an innovation is with an organi-

zation's context, the less "pushing" of the innovation and trying to enlist increasing levels of organizational support is necessary on the part of the champion.

As argued earlier, MLB had become an unwitting prisoner of industry convention. Hamel and Getz (2004) argue that to counter such convention and resulting inertia with radical innovation, an understanding must emerge that standard industry practices have become "dogma" justified solely by precedent. An innovation champion, therefore, is necessary to challenge deeply held convention. In addition, a seminal element of organizational context, discontinuities in technology, is often an important determinant of radical innovation (Hamel & Getz, 2004).

### *The Moneyball Story and Overcoming Resistance*

As discussed earlier, the context surrounding the Oakland A's was inhospitable to sabermetrics. The very strong influence of tradition and history (i.e., "Baseball is all about memories" [Vincent, 2005]) worked against innovation. The threat of sabermetrics to extant skills and to livelihoods resulted in considerable resistance to the innovation. As suggested in the innovation literature, in such situations, innovation implementation is dependent upon the innovation champion having considerable organizational power.

As described by Lewis, Beane was the prototypical innovation champion. He had the necessary energy, commitment, and organizational power to propel the adoption and implementation of sabermetrics. Lewis describes Beane as a man of boundless energy: "It was hard to know which of Billy's qualities was most important to his team's success: his energy, his resourcefulness, his intelligence, or his ability to scare the living s--- out of even very large professional baseball players" (2003, p. 153). In addition, Beane was committed to sabermetrics; it was Beane's way or the proverbial highway. Only

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one-half of the scouts that were with the A's for the 2002 draft described in *Moneyball* remain with the team. In addition, Beane was (almost) all-powerful, reporting only to team ownership.

A second important determinant of the implementation of sabermetrics were advances in computing technology, mainly powerful PCs, that provided the fast, powerful computational capabilities necessary for implementing the innovation. We see then that both a powerful innovation champion and discontinuities in technology were in place for the adoption and implementation of sabermetrics by the Oakland A's.

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### ***Implications of the Moneyball Story for the HR Executive: The Importance of the Innovation Champion***

HR professionals are not generally known for their organizational power or their ability to effectively champion change within their organizations. Authors who advocate implementing HRM innova-

tions inevitably cite the need for "support from top management" as a prerequisite to effective implementation. This is not surprising given the history of HR and its place as a staff function. Consequently, adopting a sabermetrics-type approach to HR requires an energetic and charismatic champion.

Depending upon the nature of the innovation, two types of champions might emerge. For internal HR innovations a visionary and intelligent senior vice president of human resources (SVPHR) might effectively champion the program. For instance, Randy McDonald, as SVPHR at Verizon, pushed through the development of an HR scorecard (Walker & MacDonald, 2001), one of the first of its kind. Since becoming the SVPHR at IBM, he has implemented a similar, yet more extensive HR scorecard. Because the scorecard largely impacts only the HR organization, he was able to effect the innovation without a significant champion external to the HR function.

However, when an HR innovation impacts those outside HR, in particular the line organization (i.e., it has significant magnitude and pervasiveness), an external champion will likely be required. For instance, Dave Pace, SVPHR at Starbucks, describes the fact that after reading *Moneyball*, the chairman and CEO, Howard Schultz, tasked HR with the challenge of identifying Starbucks's equivalent of OBP. Such a champion, external to HR, bodes well for Starbucks's ability to push this innovation through to successful implementation.

The implementation of global HR information systems (HRISs) has become almost ubiquitous within large multinational corporations. These systems compile and store a vast amount of data on all employees, across all jobs, worldwide. These data provide the foundation for building a sabermetrics-type approach to HRM. The effective use of HRIS in this manner, however, as in the case of sabermetrics, necessitates effective championing as well as significant technological knowledge and support.

### **Does Sabermetrics Provide a Competitive Advantage, and if So, How?**

#### *The Strategic Management Literature*

In an effort to assess how sabermetrics might provide a competitive advantage, we employ the resource-based view (RBV) of the firm, a perspective that has emerged as a major strategic paradigm (Berman, Down, & Hill, 2002). According to Barney (1991), a firm's resources "include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness" (p. 101).<sup>3</sup> As argued by Barney (1991, 1995), the RBV stipulates that firms are endowed with heterogeneous bundles of resources and that competitive advantage accrues if, and only if, a resource (or bundle of resources) is:



(1) valuable, in the sense of enabling an organization to conceive of and/or implement strategies that exploit opportunities and/or improve its effectiveness and

(2) rare, among current and potential competitors. A resource that is possessed by a large number of organizations will not be a source of competitive advantage.

### *The Moneyball Story and the Strategic Management Literature*

Sabermetrics works. The Athletics' approach to identifying hitters with superior skills at reaching base without paying a market premium for them has resulted in winning games at a discount relative to the competition. Beane's A's have been near the top of the league's standings despite being outspent by nearly all their competitors (Hakes & Sauer, 2004; Lips, 2004). Table I presents evidence of this.

Since Billy Beane took over the Athletics prior to the 1998 season, the team's winning percentage has increased dramatically, while the team's payroll has decreased just as dramatically. By identifying players with superior skills not so identified by competitors, sabermetrics meets the RBV "value" criterion. When implemented by Beane (in preparation for the 2002 draft), sabermetrics met the RBV "rare" criterion as well. Based on the RBV criteria, therefore, we see how sabermetrics can provide a competitive advantage.

### *Implications of the Moneyball Story for the HR Executive: Achieving Competitive Advantage via HR Innovation*

One can certainly see how sabermetrics enables the Oakland Athletics to achieve superior performance at lower cost. The superior use of data to exploit information asymmetries gives the team the ability to attract high-quality players at a lower than market price. Imagine how valuable it would be for companies to have the ability to identify, attract, and retain superior talent at a cost advantage relative to competitors.

Returning to the HRIS example, note that vast reservoirs of data now exist that have the potential to provide insight concerning the characteristics of the most talented employees and their location within the organization. While such data may be embedded in the system, without the ability to exploit that data, an expensive HRIS becomes virtually useless for gaining competitive advantage. For example, one HR executive in a working group on HR functional excellence described his firm's HRIS as follows: "\$200 million later, now I know how many employees I have . . . almost."

On the other hand, IBM has increasingly focused on how it might exploit the information embedded in its HRIS as a way of outperforming competitors. IBM's HRIS contains information on each consultant's skills and experience relevant to a number of different types of consulting projects as well as each consultant's salary and location. IBM's consulting opportunities arise

**TABLE I** Oakland A's: Wins/Costs

	1991–1997	1998–2005	2002–2005*
Win %	47.5	56.5	58.3
Win % Rank**	18.1	8.2	8.3
Payroll Rank	12.7	24.8	22.3
Cost/Win Rank	17.6	4.4	5.8

\* since the *Moneyball* draft.

\*\* among 30 teams

all around the globe for limited periods of time; the firm needs to identify the skill sets of consultants and how they match various project requirements. Consequently, IBM has gained a competitive advantage through leveraging the information in its HRIS to find (a) the right consultant (i.e., with the relevant skills and experience), (b) the right place (i.e., at or closest to the project geographically), and (c) the right price (i.e., the lowest cost consultant). Thus, IBM is able to exploit HRIS information to have successful projects

that are extremely cost-effective (Kirkpatrick, 2005). As does sabermetrics for the Oakland A's, IBM's HRIS contributes a competitive advantage by providing valuable information that is rare in its industry.

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### **Is the Competitive Advantage Provided by Sabermetrics Sustainable?**

#### *The Strategic Management Literature*

We return to the RBV to address the potential of sabermetrics providing a sustained competitive advantage. In addition to the RBV "value" and "rare" criteria discussed earlier, to contribute to a sustained competitive advantage, a resource must meet two further criteria that we consider in turn.

(3) It must be imperfectly imitable/substitutable in the sense that competing organizations face cost and/or quality disadvantages in developing a duplicate of the resource or in developing an appropriate substitute for it.

In addressing imitability, it is helpful to consider the importance of history as well as socially complex resources. As organizations evolve, they acquire skills, abilities, and resources that may be unique to them. Whenever the acquisition or development of valuable and rare resources depends upon unique historical circumstances, those imitating

these resources will be at a disadvantage. While it is relatively easy to purchase physical resources or software, this is not the case with socially complex resources (i.e., organizational phenomena such as trust, friendship, teamwork, culture, and reputation).

The importance of history and related socially complex resources foreshadows the fourth RBV criterion:

(4) organization; the firm must be organized such that it can realize a competitive advantage based on resources that add value, are rare, and are imperfectly imitable/substitutable.

Organizational components are considered complementary resources as they have very limited ability to contribute to competitive advantage directly. Their true value comes in combination with other resources and capabilities (Barney, 1991, 1995). Numerous aspects of a firm's organization (e.g., structure, control and reward systems, communication, and leadership) are relevant here.

In his article "What Is Strategy?" Porter (1996) makes some RBV-related arguments that are relevant to the sustainability of competitive advantage. Porter argues that competitive advantage arises from an organization's choice of unique activities and/or by performing activities more efficiently than competitors. He argues further that increased diffusion of best practices in today's environment often results in competitive advantage being temporary.

Porter proposes that activities—their choice and/or their performance (i.e., how they are implemented)—form the bases of sustainable competitive advantage. He states that firms' competitive advantages (e.g., those of Southwest Airlines and Ikea) are based on unique, tailored sets of interlocked activities, with entire business systems of activities fitting and reinforcing one another. Strategic fit among activities reduces costs and/or increases differentiation and is fundamental to the sustainability of competitive advantage. In other words, it is more difficult to match an array of interlocked processes

and activities than it is to imitate one or two processes, or activities.

### *The Moneyball Story and Sustained Competitive Advantage*

The Oakland A's created competitive advantage through their choice to implement sabermetrics. During and following the 2003 season, however, two senior managers from the Athletics' front office were hired as general managers by the Toronto Blue Jays and the Los Angeles Dodgers (Saraceno, 2004). In addition, the Boston Red Sox hired the father of sabermetrics, Bill James, in an advisory capacity (Hakes & Sauer, 2004). Obvious questions that come to the fore are: (1) is sabermetrics, as implemented by the A's, imitable? and (2) given the movement of senior managers from the A's, who were closely involved in implementing and administering sabermetrics, has the Athletics' competitive advantage been lost?

Very preliminary analyses indicate that competitive advantage provided by sabermetrics may not be sustainable. Hakes and Sauer (2004) argue that sabermetrics has spread with sufficient speed that prices in baseball's labor market no longer exhibit the "Moneyball anomaly," that the market inefficiency disappeared when Athletics' managers were hired to run competing franchises. We maintain, however, that it remains too early to make a definitive statement concerning the sustainability of the Athletics' sabermetrics-based, competitive advantage, as their advantage may be sustained by performing sabermetrics more efficiently than their competitors. It might be that the Athletics' unique historical circumstances and related organizational structure and systems developed by Beane, as well as his leadership, will result in a disadvantage for those attempting to imitate sabermetrics.

Porter's ideas concerning interlocked activities as well as Barney's proposition that to sustain a competitive advantage a firm must be appropriately organized are relevant here. In addressing whether the Athletics' sabermetrics-based competitive advantage will be sustained, it is useful to consider whether the

Athletics' socially complex resources (i.e., the front-office structure, teamwork, and culture developed by Beane as well as his leadership) will result in those attempting to imitate sabermetrics being at a disadvantage. While a competitive advantage was created by the Athletics' choice of implementing sabermetrics, their competitive advantage may be sustained by performing sabermetrics more efficiently than their competitors (Porter, 1996).

### *Moneyball, Sabermetrics, and Sustained Competitive Advantage: The Future*

Preliminary research of the implementation of sabermetrics provides some insight into another way that this innovation might lead to a sustainable advantage. This research indicates that an MLB team, the Cleveland Indians, under the leadership of General Manager Mark Shapiro and his top management team, has adopted an innovative, interlocked systems approach in implementing sabermetrics. The Indians have done so through the design and implementation of two proprietary programs—DiamondView and PlayerPlan. These two innovative programs incorporate the four functions of the HRM cycle (*recruiting and selection, appraisal, training and development, and compensation*). Consistent with Porter's interlocked business systems argument, the HRM cycle should operate as a congruent, reinforcing system. Also consistent with Porter, to the extent that sabermetrics is limited to any one HRM subsystem (e.g., *recruiting and selection*), its sustainability will be limited while to the extent that sabermetrics is implemented in a systematic, holistic manner, the sustainability of advantages gained will be greater.

The Indians' DiamondView is a comprehensive player database system that is updated electronically on a daily basis. It contains scouting reports, player statistics, biographical information, injury reports, video footage, player contract and team

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*Very preliminary analyses indicate that competitive advantage provided by sabermetrics may not be sustainable.*

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payroll information, and notes from trade discussions for the nearly 6,000 major- and minor-league professional baseball players. The purpose of the system is to increase the precision of *appraising* players' performance and value. DiamondView thus facilitates *recruiting and selection* and has also facilitated the determination of optimum *team salary distributions* (Vinella & Mangels, 2003).

PlayerPlan is a detailed program for player *training and development*. The objective of PlayerPlan is to precisely evaluate and improve each player's skills. Coaches and instructors determine a player's

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*The potential of a sabermetrics-type HR approach to constitute a source of sustainable competitive advantage is relatively high.*

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needs (physical, baseball fundamentals, mental) and develop a plan to overcome identified deficiencies. The manager and player discuss the plan, with the objective of the player taking ownership. The plan is added to the player's file in DiamondView (Vinella & Mangels, 2003).

We see then that the Cleveland Indians use DiamondView and PlayerPlan in (a) recruiting and selection, (b) appraisal, (c) training and development, and (d) compensation. We believe that this systematic, holistic approach

taken by the Indians in applying *Moneyball* insights, consistent with Porter's arguments concerning unique, tailored sets of interlocked activities that reinforce one another, will contribute to the sustainability of advantages gained. Importantly, the Indians' HR innovations have been implemented by what Chen (2004) has described as "the new breed of front-office executives: fresh, Ivy League-educated faces . . . men who often have less (than) impressive baseball credentials . . . (but are) believers of the importance of statistical evaluation."<sup>4</sup> Outcomes related to the integrative approach taken by the Indians in applying *Moneyball* insights are presented in Table II (Mark Shapiro assumed the role of general manager subsequent to the 2001 season). One notes all of the outcomes moving in the desired direction. Dramatic decreases in payroll have been accomplished by substantial increases in the winning percentage.

### *Implications of the Moneyball Story for the HR Executive: Achieving Sustained Competitive Advantage*

The potential of a sabermetrics-type HR approach to constitute a source of sustainable competitive advantage is relatively high. Such an approach would require HR professionals with substantial skills in strategic thinking, analytics, and change management. In a recent study conducted by Towers Perrin (2005), however, these were three of the five lowest-rated skills of existing HR professionals.

In particular, HR professionals facile with data are few and far between. As Carrig and Wright (in press) note, analytical skills become more and more important within an information-based economy. Too often, "information" is defined only with regard to products and services related to external customers, rather than information being recognized as having critical importance to the internal workings of organizations. Yet few HR professionals have requisite skills to analyze data in a way that might enable the firm to create performance advantages.

Note that this state of affairs stems logically from the facts that (a) HR has never had to analyze much data because (b) organizations did not have much data to analyze and (c) past technology did not allow for efficient data analysis. As we have seen and discussed, the technology now exists, and it is being combined with vast reservoirs of data. The only missing piece to the puzzle is the HR professional's competency to use the technology and data to derive superior human capital strategies.

The potential for the sustainability of such an advantage stems in large part from the rareness of HR professionals with these analytical skills along with a professional culture that values facts to a greater extent than research-based knowledge (Rynes, Colber, & Brown, 2002). Firms that build the capability to develop and implement information-based human capital strategies will likely be able to maintain that advantage for a significant period of time. As is the case with the implementation of sabermetrics,

**TABLE II** Cleveland Indians: Wins/Costs

	2002	2003	2004	2005
Win %	45.7	42.0	49.4	57.4
Win % Rank*	20.0	25.0	17.0	6.0
Payroll Rank	9.0	26.0	27.0	26.0
Cost/Win Rank	25.0	11.0	3.0	2.0

\* among 30 teams

new skill sets and a supportive organizational culture will be necessary for the successful implementation of information-based human capital innovations.

### **Conclusion: The Relevance of the Moneyball Story to HR Executives**

*Moneyball* describes the story of how the Oakland Athletics overcame cultural obstacles to implement sabermetrics—a data-based approach to organizational decision making—in a manner that created a competitive advantage. We have explored this story through the lens of the management of innovation and strategic management literatures to draw some implications for HRM. This leads us to the following concluding thoughts.

#### *Information/Data Becomes Increasingly Important to Effective Human Capital Management*

The recent obsessions with human capital management, HR metrics, and HRIS have tended to travel parallel paths with little synergy. While some of the metrics have focused on human capital, and human capital might be an input to an HRIS, what seemingly has been missing is an integrated approach to human capital strategy that realizes the synergies among these different components.

Just as MLB had a focus on talent (i.e., human capital), on statistics (i.e., metrics) and recently on information technology, it was not until sabermetrics provided the platform for integrating all three that the Oakland Athletics were able to exploit the infor-

mation asymmetries inherent in their competitive environment. These three levers all now exist within the larger corporate environment, but the question remains concerning who will be the first to integrate them, and thus, identify and exploit the information asymmetries that exist.

#### *The Competencies of HR Professionals Will Have to Change*

As academics that have taught HR professionals throughout their undergraduate and graduate careers, we have had numerous opportunities to observe how they approach certain courses within the curriculum. Regardless of the university, future HR practitioners almost universally shy away from the more analytical classes such as statistics, research methods, operations management, management information systems, accounting, and finance. If not required, future HR managers avoid these classes. If such classes are required, they are endured in order to receive a passing grade without truly capturing the knowledge provided. In a “*Moneyball*” world of HRM, the knowledge and skills required will be provided in the very classes that prospective HR professionals detest.

Efforts by baseball teams to adopt sabermetrics have brought about “the new breed of front-office executives: fresh, Ivy League-educated faces . . . men who often have less impressive baseball credentials than Garth Brooks. For a stat-head to break into the big leagues was, not long ago, almost unheard of. Now believers of the importance of statistical evaluation are infiltrating management

and infusing teams with a Wall Street-style sensibility for 'beating the market'" (Chen, 2004, p. 64). There will likely have to be par-

allel changes in the type of individuals who work in HR for sabermetric-type HR innovations to be implemented.

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## NOTES

1. The term innovation is often used loosely and interchangeably with terms such as change. One of the most frequently cited academic definitions of innovation suggests that it refers to "any idea, practice, or material artifact perceived as new by the relevant unit of adoption" (Zaltman et al., 1973). Differentiators of innovation are scale (the extent to which there is a radical break with the past) and domain (the extent to which the innova-

tion is new to the world or simply new within a specific context). In the main, most analysts are interested in innovations that make a significant impact rather than mere routine and incidental change (Storey, 2004, pp. xvi–xvii). Sabermetrics is clearly a radical innovation, one that remains novel; the first "sabermetrics draft" was conducted by the Athletics in 2002 (Lewis, 2003), and only five (or so) MLB teams have adopted it to date. As it diffuses, of course, sabermetrics will become less novel. As that occurs, however, we

embrace the perspective that sabermetrics will be an innovation to each team that adopts it since it will be new to that organization (Rogers, 1985).

2. Adopting a sabermetrics approach thus implies changes in a number of areas: in performance statistics, player assessment, and in-game tactics. Baseball teams can “dabble” in aspects of sabermetrics; in considering sabermetrics a radical innovation, however, we are referring to its broad-based use, as exemplified by the Oakland Athletics.
3. While we adopt Barney’s broad definition of resources, others differentiate resources from capabilities (e.g., Hoopes, Madsen, & Walker, 2003; Makadok, 2001), defining a capability as “a special type of resource—specifically, an organizationally embedded, nontransferable, firm-specific resource whose purpose is to improve the productivity of other resources possessed by the firm” (Makadok, 2001, p. 389).
4. Central to the implementation of these initiatives by the Indians are Mark Shapiro, executive VP and general manager, graduate of Princeton University; Chris Antonetti, assistant general manager, graduate of Georgetown University; and Mike Chernoff, assistant director of baseball operations, graduate of Princeton University.

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COMMENTARY ON  
“RADICAL HRM INNOVATION AND  
COMPETITIVE ADVANTAGE:  
THE *MONEYBALL* STORY”

**WHY ORGANIZATIONAL SCIENTISTS CARE ABOUT  
*MONEYBALL***

**JOEL BROCKNER AND FRANCIS J. FLYNN**

**D**ifferent strands of evidence suggest that Michael Lewis's (2003) book, *Moneyball*, has attracted the attention of management scholars. Thaler and Sunstein (2003) gave it a glowing review in the *New Republic*, the fine article by Wolfe, Wright, and Smart (2006) in this issue grew out of a well-attended session at the 2005 Academy of Management meetings, and Roberto (2005) recently wrote a Harvard Business School case on this topic. Moreover, our own informal conversations with colleagues indicate that the book has caught their eye. Some of the reasons for scholars' growing interest in *Moneyball* may be independent of its implications for management. After all, baseball is the great American pastime, and many of us have deep connections to the game. We played it as kids and we are longtime fans. Indeed, one of us has been an ardent Yankees fan for about 50 years, whereas the other has been a loyal Red Sox fan for approximately 30, living proof that coauthorship conquers all. Aside from having an affinity for the sport, management scholars are sympathetic to the sabermetrics method, a data-driven approach to making decisions that is consis-

tent with the scientific enterprise in which many of us are engaged.

Perhaps more to the point, *Moneyball* provides a playing field for many topics of interest to management scholars, spanning micro and macro levels of analysis. At the micro level, *Moneyball* speaks to an ongoing debate in human judgment and decision making: whether people in organizations should rely on hard data (e.g., systematically recorded evidence) versus soft data (e.g., those gathered from intuition) to form judgments and make decisions. In the clinical and organizational psychology literatures, this debate finds expression in the longstanding question of whether data gathered from tests or structured interviews are more predictive of behavior than is information gleaned from unstructured interviews or clinical impressions (Meehl, 1954).

The “hard versus soft” distinction also appears to apply to the decision-making style used by the longtime chairman of the Federal Reserve, Alan Greenspan, and his successor, Ben Bernanke. In the *New York Times* (Andrews, Porter, & Uchitelle, 2005), one of Mr. Bernanke's long-time colleagues predicted that Mr. Bernanke will “probably

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work towards depersonalizing monetary policy.” That same colleague also suggested that Mr. Bernanke is an advocate of Bill James’s books on sabermetrics, “which often argues for statistical analysis over intuition. . . . Perhaps the best way to establish transparency, Mr. Bernanke has written, is to set up an easily understandable process. It is in many ways the opposite of the image that Mr. Greenspan has helped cultivate, that of an oracle.”

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The tension between using hard and soft data also underlies the veritable explosion of theory and research in the related fields of behavioral decision making, behavioral economics, and behavioral finance (e.g., Belsky & Gilovich, 1999). The normative view in classic economic models would have us believe that people are tough-minded scientists who rely on hard data to form judgments and make decisions. Instead, we find that people also rely on cognitive shortcuts, intuitions, and “gut feelings,” often leading to decisions that deviate from a classical definition of economic rationality.

In considering prospective talent for his organization, Billy Beane, for his part, draws more on statistical evidence (i.e., objective indicators of a player’s previous performance, which is assumed to be the best predictor of future performance) than on the more subjective impressions of so-called experts in judging talent. Perhaps this is because reliance on subjective impressions led Billy Beane to be misjudged early in his playing career. As a high school player, Billy Beane seemed to fit the profile of someone who could develop into a major league star. He possessed impressive physical skills that occasionally helped him to perform great feats on the field. Relying on this representativeness heuristic in appraising Billy Beane, major league scouts somehow did not take into account the harder evidence—for example, the fact that his on-field performance plummeted from his junior to his senior year of high school.

Sabermetrics further suggests that the hard data underlying subjective impressions may themselves be problematic. It is not simply that Billy Beane relies on objective indicators. Rather, he relies on the kinds of objective measures that have statistically been proven to be more valid indicators of a player’s true value than those conventionally measured. For example, players, fans, managers, and Hall of Fame election committees have long believed that a player’s batting average is a tried and true indicator of his value. Batting average is important, to be sure, but may be less revealing of a player’s true value than is his on-base percentage. Rather than being anchored to the conventional wisdom about how players should be appraised, Beane has relied on a different set of criteria, enabling him to be a considerably more efficient manager of human resources than his counterparts at some of the more free-spending major league teams.

By touching on topics of interest to management scholars, *Moneyball* may help to stimulate further thinking and research. To provide just one example, whereas sabermetrics predicates the use of hard data over soft, certain conditions may exist under which the latter is more diagnostic. In *Blink*, Gladwell (2005) reviews scientific evidence that “snap judgments” may be remarkably accurate, sometimes more so than judgments arrived at on the basis of hard facts. To be sure, decisions are usually more likely to be accepted and implemented in organizational settings if they *appear* to be based upon a hard-nosed analysis. However, the hard-nosed analysis itself may not be necessary for improved judgment and decision making. Thus, an extremely important matter for future research is to delineate when and why data-driven versus soft approaches lead to better judgment and decision making.

As with most complex matters, contingency theories may be more useful than hard and fast rules in mediating this debate. For example, sabermetrics suggests that certain in-game strategies, such as bunting and stealing, are not advised. However, they may make sense in certain situations (e.g., in stealing, when a base runner is excep-

tionally quick or a pitcher is unusually slow to the plate). Moreover, sabermetrics is based on the premise that a player's past performance is the best predictor of his future performance. Right off the bat (so to speak), we know that this is not always the case, such as when a player has been injured or has reached a certain age. Clearly, contingency approaches may be helpful to baseball executives, but what may be most interesting to management scholars is determining how much complexity (e.g., the absolute number of contingencies factored into a single decision) is sensible for practitioners to consider.

At the macro level of analysis, *Moneyball* has important implications for theory and research on organizational innovation and organizational change. The innovation literature has concerned itself with two related questions. First, what factors predispose organizations to adopt certain innovations? Second, what factors make adopted innovations more versus less likely to be successful? *Moneyball* speaks to both of these matters. Whereas Billy Beane was the first baseball general manager to base his decisions on sabermetrics to a significant degree, sabermetrics had been around for a long time; Bill James began writing his books in the 1970s. Why, then, was it adopted by Billy Beane and not others, and relatedly, why did it take so long for baseball executives to take heed? *Moneyball* reminds us that innovation adoption is jointly determined by personal and situational factors. Some of the personal inputs highlighted in this case include Billy Beane's high level of energy, his credibility (having played the game), and his powers of persuasion. Situational factors include the fact that his organizational superiors gave him a wide degree of decision-making latitude.

Moreover, as Wolfe, Wright, and Smart (2006) point out, what may have given Beane a competitive advantage over his counterparts who did not adopt sabermetrics is that major league baseball (as an industry) is steeped in tradition. Much of the innovation literature has examined factors residing

within organizations that affect the likelihood of successful implementation of innovations. *Moneyball* (and Wolfe et al.'s analysis) suggests that factors residing external to organizations also have much to say about whether innovations will be successful. To the extent that success depends upon being the first mover, or on competitors being slow to adopt the innovation, Beane's early success may be due to an exceptionally strong industrywide tendency to maintain the status quo.

The book also reminds management scholars and practitioners of the need to delineate factors that enable organizations to *maintain* the competitive advantage produced by innovation. One of the potential downsides of being a successful innovator is that competitors begin to watch your every move, which may threaten continued success. For example, if Beane were to express interest in a less-touted prospect (by, say, flying out to a game to watch him play), richer teams might interpret his actions as a sign that the player is undervalued, thereby leading them to offer the player more money than Beane could. This dynamic reflects a fundamental rule about the nature of competition: to the extent that the bases of competitive advantage are public knowledge, competitive advantage becomes more difficult to maintain. In fact, several other teams have actively embraced sabermetrics as a basis of decision making, and one (the Los Angeles Dodgers) even hired one of Beane's chief lieutenants (Paul DePodesta). Interestingly enough, however, the Dodgers did not perform particularly well on DePodesta's watch, and he was recently fired.

One of the most intriguing macro themes emerging from *Moneyball* is the baseball system's reactions to Beane's innovation. System reactions (or lack thereof) actually began more than 30 years ago, when Bill James wrote his first books. James's approach was potentially a source of huge competitive advantage. Why,

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*One of the potential downsides of being a successful innovator is that competitors begin to watch your every move, which may threaten continued success.*

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then, was it ignored for so long? The baseball establishment's initial (and long-running) rejection of sabermetrics is reminiscent of another example of how a system may dismiss a source of competitive advantage.

In the classic *Gunfire at Sea*, Morison (1966) describes how at the turn of the twentieth century, a junior officer in the U.S. Navy, William Sims, notified his superiors of a technological breakthrough (known as continuous-aim firing) that improved shooting accuracy by 3000%. His superiors responded first by ignoring Sims, then by denying that such a breakthrough was possible, and finally by branding Sims as a "crack-brained egotist, . . . a deliberate falsifier of evidence" (p. 135).

As Wolfe, Wright, and Smart (2006) suggest, innovation threatens those with a vested interest in maintaining the status quo. That vested interest sometimes runs so deep that it may override technical rationality, as in, "Don't bother me with facts, my mind is made up." In this sense, it is easy to understand why the baseball scouts in Billy Beane's organization would reject sabermetrics. After all, if sabermetrics was in, it meant that they would be out (of jobs). However,

*Moneyball* reminds us that organizational innovations affect multiple constituents who may have other reasons for wanting to maintain the status quo, such as when their sense of personal identity is based upon the system as it existed prior to the innovation. In his prologue to the book, Michael Lewis recounts how Joe Morgan, a baseball Hall of Famer, and now a baseball announcer for ESPN, was in such denial about the implications of *Moneyball* that he could not even correctly identify its author; Morgan insisted that Billy Beane, and not Michael Lewis, wrote the book.

In conclusion, we believe that *Moneyball* elucidates many valuable insights unearthed by management scholars. So, while we pay homage to the veridicality of the book's ideas as they play out on the baseball diamond, we also feel inspired to conduct future research that may lead to greater insights for both the organizational theorist and practitioner. *Moneyball* and management—now, there's a great double play combination.

*We are indebted to Richard Wolfe for his constructive comments on an earlier version of the manuscript.*

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# COMMENTARY ON “RADICAL HRM INNOVATION AND COMPETITIVE ADVANTAGE: THE *MONEYBALL* STORY”

## APPLYING *MONEYBALL* IDEAS OUTSIDE OF BASEBALL: THE PERSPECTIVE OF A BUSINESS SCHOOL DEAN

ROBERT J. DOLAN

**W**hen *Moneyball* was published in 2003, I violated my principle of never paying full price for a hardcover book. Waiting a week or two for the 30% discount to become available in my local bookstore was too high a price to pay given the attractiveness of a Michael Lewis book about statistics and baseball for a person like me who: (1) relished Lewis's previous book *The New Thing*, (2) was trained as a mathematician and statistician, and (3) continued a lifelong dysfunctional, emotional relationship with the Boston Red Sox. As *Moneyball* aptly points out, you have to question the conventional wisdom (e.g., “never buy at full price”) and, in this case, I was glad I did. The \$24.95 list price was a bargain for insights into the game I love. But the book also provided me stimulation to think about the job I was doing as the “general manager” (sort of anyway, the analogy is not perfect) of a business school whose endowment (both physical plant and dollars) was Oakland A's-like, suffering in comparison to the institutes which we call our “peer institutions” or “competitors” depending upon the circumstance.

While most would say that *Moneyball* is a book about Billy Beane, to me it is a book

about two people—Bill James, the philosopher and conceptualizer of the ideas, and Beane, the implementer within an industry decidedly not receptive to the James gospel. The question “are *Moneyball* ideas applicable to managing a business school or other organizations?” really has two parts. First, is the message of the James gospel relevant to business schools and, second, if so, can these lessons be implemented by perhaps taking a page from Beane's book?

### The James Gospel

James's central message is not to “use statistics” in management but rather to apply the scientific method. Baseball's “violation” of the scientific method is noted throughout the *Moneyball* book.

For example,

- To describe the scouting of future mediocre major league player Billy Beane as a high-school baseball star we are told: “Each time the scouts saw Billy *they saw only what they wanted to see*: a future big league star” (Lewis, p. 8, emphasis mine).
- More generally, on the traditional scouts of talent, “the old scouts are like a Greek chorus, it is their job to underscore the eternal

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themes of baseball. . . . the old scouts aren't built to argue; they are built to *agree*" (Lewis, p. 30, emphasis in original).

The evaluation of talent in baseball suffered from a flaw common to many scientific and management endeavors—namely, the seeking of and granting salience to only those data capable of confirming prior beliefs. James described the result of this attitude being “a great portion of the sport's traditional knowledge is ridiculous hokum” (Lewis, p. 94). James advocated the use of statistics but worried that without a more fundamental shift in thinking from seeking confirming data to a hypothesis testing and revision model, the wide availability of statistics would create a situation where “we are no longer capable of truly assimilating any knowledge which might result from them” (p. 95).

Lewis himself describes the “whole point of James” as adoption of the scientific method: “Think for yourself along rational lines. Hypothesize, test against the evidence, and never accept that a question has been answered as well as it ever will be. Don't believe a thing is true just because some famous baseball player says that it is true” (Lewis, p. 98).

At its core, the primary message of *Moneyball* is the same one advancing the scientific method at the heart of the research methods course taught in graduate schools everywhere. It is old advice, just delivered in a more fascinating and engaging way (at least to a baseball fan) than we typically encounter in the academic literature.

Defining the “major lessons” of *Moneyball* in this way renders moot the question of “are *Moneyball* lessons applicable to management of business schools and other organizations?” Figure 1 draws on the Wolfe, Wright, and Smart article's partitioning of the input to the system as (1) performance characteristics of players and (2) in-game decisions. The advocacy of applying a rigorous, scientific approach to defining the right outcome measures and developing understanding of the workings of the system portrayed in Figure 1 extend to all organizations.

## Beane Implementation

Beane is a “necessity is the mother of invention” story. When asked, “How do you, as a \$40 million bankrolled team, compete with the Yankees and its \$226 million potential?” Beane gave the smart, yet simple answer: “What you don't do is what the Yankees do. If we do what the Yankees do, we lose every time....” (Lewis, p. 119). So, knowing what not to do is a good start, but there are still lots of options left.

Beane could only redefine the output side of Figure 1 a little bit. It would be hard to differentiate yourself from the Yankees by changing your objective function from “winning games” to “losing games.” Beane's only chance was to understand how the system in Figure 1 worked better than others did and then use that improved understanding to develop the people to operate the system and provide them explicit instructions on what to do within a game (e.g., take a pitch, swing away, bunt, hit and run, steal, tag up). Why was he successful at the “radical human resource management innovation”? (Wolfe et al., p. 112). Simple—he could control both inputs on the left side of Figure 1. For example, when the previous base-stealing wizard was acquired by Oakland and told to stop attempting steals, he did.

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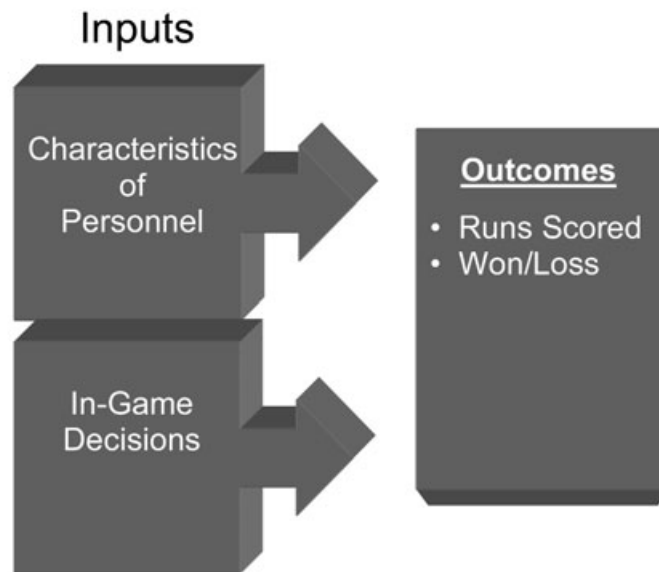
“...a great portion  
of the sport's  
traditional  
knowledge is  
ridiculous hokum”

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## Beane and Business Schools

If Beane were the leader of a business school, he would find more degrees of freedom in defining the objective function. While there really is only one plausible objective function for a Major League Baseball team, such is not the case for business schools. While we each state that we seek to develop leaders, our approaches to that are fundamentally different. There is no World Series champion each year in business schools. On that score, it would be easier to do “what the Yankees don't” on a reasonable outcome measure.

On the other hand, a Beane repotted into the business school world finds the “tradi-



**FIGURE 1.** Schematic of a Baseball System.

tions" more strong and binding than in the baseball world. The way we evaluate talent is codified in our tenure standards, and those standards are formally adopted by the faculty. There is a "strictness" in our process and criteria for selection of talent that is more bind-

ing than baseball. In this circumstance, the job of the general manager is less an individual understanding of the system's operation than guidance of a faculty process to promote adoption of the right standards and rigorous, scientific application of those standards.

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He became dean of the Ross School in July 2001 and implemented a strategy based on the school's strengths in action-based learning where students combine classroom work with in-the-field engagements with companies worldwide. In September 2004, the school obtained two marks of distinction. First, Stephen M. Ross, a graduate of the school, made a gift of \$100 million to the school in support of its strategy. This was by far the largest single gift ever made to a business school and the largest in the university's history. Second, the *Wall Street Journal*, based on its polling of recruiters, named the school's MBA program the #1 program in the country, citing its strategy of "Leading in Thought and Action." Later that fall, student evaluations placed the school at the top for leadership training in the *BusinessWeek* poll.

Prior to becoming dean at Michigan, Dolan was the Edward W. Carter Professor at the Harvard Business School. His case studies and notes published there have sold over 1.25 million copies. He is the author or coauthor of eight books including *Marketing Management: Text and Cases* and *Power Pricing* (coauthored with Hermann Simon). He published widely in journals such as the *Harvard Business Review*, *Management Science*, and the *Journal of Marketing*.



He has consulted on marketing issues, particularly product policy and pricing, with a broad range of firms and has served on the boards of both public and private firms. He has also held faculty appointments at the University of Chicago and IESE in Barcelona, Spain.

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COMMENTARY ON  
“RADICAL HRM INNOVATION AND  
COMPETITIVE ADVANTAGE:  
THE *MONEYBALL* STORY”

**THE *MONEYBALL* APPROACH—BASKETBALL AND  
THE BUSINESS SIDE OF SPORT**

**ALAN OSTFIELD**

**P**rofessors Wolfe, Wright, and Smart investigate the *Moneyball* story and apply the lessons learned to the role of the human resources executive. The views presented in the article should stimulate thoughts within the human resources profession and enable these professionals to be more successful at implementing innovations in their organizations. In this commentary, I consider the article in the context of the sports business, with particular emphasis on basketball. For purposes of this commentary, it is perhaps more appropriate to say the “business of sport,” since the main focus of my thoughts will be on the business side of sport. Make no mistake about it—sports itself is big business, as some individual teams generate hundreds of millions of dollars in revenue and will likely soon be bought and sold for close to a billion dollars. Therefore, I address both the business and sports sides in the “business of sport.”

**The *Moneyball* Approach: Basketball and the Business Side of Sport**

The use of statistics to assist in the assessment and management of player personnel has particular relevance in baseball. The relatively independent nature of the game and

methods to measure a baseball player’s performance and contribution to his team, together with baseball’s long history of collecting statistics, ensure that baseball is a fertile ground for statistical analysis.

In basketball, however, statistics are not as easily used to measure a player’s contribution to team performance. Due to the nature of the game itself, basketball players are more dependent on each other for the team’s performance than are baseball players. Therefore, it is necessarily more difficult to use statistics to assess player personnel in basketball (and various other sports) than it is in baseball.

Statistics being less relevant in assessing a basketball player’s performance and contribution to his team, however, does not mean that statistics are irrelevant. The questions are how relevant are they, how should they be used, and how much weight should they be given in team management? Certainly, statistics such as shooting percentage, points per game, and rebounds per game are part of the basketball vernacular and are therefore often used by team management. While we have not yet seen what could be described as a “revolution” in baseball, basketball teams are, as was described in a recent *Sports Illustrated* article (Ballard, 2005), beginning to incorporate statistical analysis

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into their decision making along the lines described in *Moneyball*. In the years ahead, with the sports business continuing to evolve, the risks of the business continuing to increase, and the success of *Moneyball* teams in baseball, we might very well see basketball teams increase their use of statistics in the assessment and management of player personnel.

A larger point to be taken from *Moneyball* and the Wolfe, Wright, and Smart article that applies to the sport side of basketball, the business side of sport, and to more traditional businesses is the increased use of objective data in an organization's decision-making processes. The "innovation" described in *Moneyball*—the use of additional and more objective data to assist in the assessment and management of baseball players—has implications far beyond baseball, player assessment, and sports. Businesses, regardless of the industry, can benefit from incorporating a wider range of information (including more objective information) into their decision-making processes. As Wolfe, Wright, and Smart state, the "superior use of data to exploit information asymmetries" is what gives an organization the ability to make better decisions than others and obtain a competitive advantage. A related issue in considering the application of the *Moneyball* approach to baseball, basketball, or business is the way that the organization and decision makers bring relevant disciplines together and balance the use of the available and appropriate information. The leader must bring together all of the various disciplines and balance the use of objective (and perhaps trendy) information with other subjective (and perhaps traditional) forms of information. The appropriate blend of information depends on the particular circumstances.

Perhaps, in certain cases, the *Moneyball* approach has dominated other relevant information and elements of analyses (e.g., the traditional subjective views of scouts). Or perhaps the *Moneyball* approach only appears to have dominated in certain cases because it received so much publicity due to its contrast with baseball's traditional reliance

on subjective information. A person making decisions regarding baseball players (or other types of employees) needs to have an appropriate framework for evaluating players (or other types of employees). This framework could include the traditional, subjective data as well as the newly publicized and/or developed objective data. Properly balancing and using *all* relevant data is what good leaders do, creates good decision-making processes, and produces effective decisions, something to which all leaders (whether evaluating players or "traditional" employees) should strive.

### Major Change and the Importance of Timing

As described in *Moneyball* and by Wolfe, Wright, and Smart, the Oakland Athletic's experienced a set of circumstances that created the impetus for the implementation of sabermetrics. Significant change was needed, as the team's revenue structure did not permit them to compete with large-revenue teams in the traditional way. The Athletics' timing was particularly right, as they were in the unique situation of having seven first-round picks in the 2002 draft described in *Moneyball*. This increased the benefits of being right and the risks of being wrong, thus placing greater pressure on their drafting decisions. Finally, but perhaps most importantly, the A's had a leader who could make it happen, as Billy Beane had the pedigree of having been a ballplayer, the knowledge that something different was needed, the willingness to act outside the norm, and the security of knowing that ownership was fully behind him. While other organizations outside of professional sports often experience similar dynamics that necessitate change, such dynamics might be particularly applicable to professional sports teams given the "haves" and "have-nots" distinction that often exists among them.

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*The leader must bring together all of the various disciplines and balance the use of objective (and perhaps trendy) information with other subjective (and perhaps traditional) forms of information.*

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## Major Change and the Likelihood of Resistance

*Moneyball* and the Wolfe, Wright, and Smart article describe the resistance met by Billy Beane and his like-minded colleagues when they tilted the decision-making process toward reliance on statistics and away from traditional subjective assessment. The resistance that Beane confronted is understandable given the tradition-bound nature of baseball and the experiences of many of the people whom Beane was dependent upon to implement sabermetrics (the scouts' experience was limited to baseball and to traditional subjective, as opposed to objective, statistical assessment of talent).

There would likely be resistance to significant change in basketball for many of the same reasons. However, basketball might be more accepting of change than baseball, given that factors such as baseball's long history and significance of tradition are not as influential in basketball. Also, National Basketball Association Commissioner David Stern has been, and continues to be, quite progressive. He and his staff often push for and are receptive to new ideas, so change is more likely to be accepted (and, in fact, encouraged) in the NBA.

## Factors That Enabled the Oakland A's to Successfully Implement the *Moneyball* Innovation

By all measures, the Oakland A's under the leadership of Billy Beane were successful at implementing a new method of assessing and managing player personnel. But this was no easy task. The Oakland A's had strong leadership (ownership, president, and gen-

eral manager), a good public face for the change in Billy Beane, a very strong belief in the appropriateness and necessity of the change, and an infrastructure (including like-minded, appropriately educated, young baseball operations executives) that was able to support the desired change. In addition, Beane and the A's had several "early victories," both in the form of particular players doing well and the A's making the playoffs, that helped them to overcome initial doubts and hurdles, provided continued confidence that they were proceeding along the appropriate path, and propelled them to continued change and improvement.

To successfully implement change of any significant magnitude, an organization needs a variety of factors working together at the appropriate time. To increase the odds that implementing change will be successful, leaders should recognize the natural difficulty often associated with change, attempt to implement change with the right people at the right time (organizations too often attempt to implement change in challenging times, when people most want to hold on to what has worked in the past), estimate the types and amount of resistance to be faced and develop a plan for addressing such resistance and managing the change. The factors that led to the Oakland A's success in implementing sabermetrics should be emulated to the extent possible by any business considering implementing a change of this magnitude.

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# COMMENTARY ON “RADICAL HRM INNOVATION AND COMPETITIVE ADVANTAGE: THE *MONEYBALL* STORY”

## ***MONEYBALL* LESSONS: THE TRANSITION FROM HR INTUITION TO HR ANALYTICS**

**DAVE PACE**

**W**olfe, Wright, and Smart posit a significant overlap between the approach to baseball that Billy Beane advances in Michael Lewis’s 2003 book *Moneyball* and the challenges faced everyday by HR professionals in corporations across the country. The reasoning and assessment put forth in this article not only is accurate, but it also previews the increasingly complex and analytical role expected of today’s HR professionals.

The race for talent and the impending demographic challenges facing employers have been well documented for some time, yet most HR professionals have not yet responded to this reality with new or innovative thinking. Most continue to approach talent management with the same toolbox that they have always used, relying on instinct, experience, and street smarts in much the same way that the old-school scouts of the Oakland A’s did prior to the arrival of Billy Beane.

The transition from intuition to analytics in any field should not be surprising, given the vast amount of information available on any subject. We can instantly learn about individuals’ performance and general human behavior, and the achievement of

business results. HR professionals must explore these data and identify elements that differentiate the best performers currently in their organizations as well as the best prospective hires. If HR can focus talent management efforts on the true differentiators and organize that talent effectively, they will secure the talent required to deliver exceptional performance.

HR can learn from other organizational functions. For example, the finance profession went through a metamorphosis in which it moved from the traditional backward-looking discipline of accounting to the more forward-looking discipline of analysis and planning. Similarly, the HR profession must move from the backward-looking discipline of performance appraisal to the more forward-looking science of predictive analysis. Each organizational function has a responsibility to define its decision science; one that allows their organization to look forward and then act, not just look backward and then react.

This need for a forward-looking perspective means that traditional “scorecards” no longer are sufficient to lead the human capital decisions necessary in every organization. Scorecards tell you where you have been and what has been done. Predictive de-

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cision metrics, while they might be based on analyses of traditional scorecard data, tell you where you need to go. HR professionals should be held to the same standard of predictive analysis for people decisions that finance professionals are held to for capital-allocation decisions.

This perspective sends a chill down the spine of many HR traditionalists. Much the same as the traditional scouts for the A's, many HR professionals have established their roles as the premier "readers" of talent, able to assess potential based upon an instinctive analysis of a candidate's employment history and idiosyncratic answers to the "tried and true" questions of the HR interview.

While enhanced data analysis and performance predictability will no doubt be skills required of the future generation of HR leaders, the fact is that many of today's HR leaders still have a "get out of jail free" card to fall back on in the absence of such analysis. That escape route is the relatively poor quality of most human resource information systems (HRISs). For many years, the focus of most organizations has been on the continuous improvement of traditional financial systems and/or broad-reaching enterprise resource planning (ERP) initiatives. The capture of significant and meaningful people data, however, has been overlooked and pushed to the backburner of systems' priorities. As Wolfe, Wright, and Smart point out, many of these initiatives have resulted in little more than an accounting of how many people work for an organization and the minimum requisite functionality to ensure the completion of payroll.

The most likely way that organizations will respond and install the necessary data systems required to uncover the parallel of sabermetrics' "OPS" (on-base percentage plus slugging percentage) metrics for their human capital planning needs is if the HR professional drives it. The Towers Perrin analysis referenced in the article, however, suggests that this is unlikely to happen, and that an organizational change of this magnitude will require the bold leadership and passion that Beane showed with the A's.

Thus, we're left with an uncomfortable dilemma; a decision science is needed on the people side, but the systems required to produce the foundational data are generally insufficient, and the most likely analysts are not that interested in going in this direction. Therein lies the potential for short-term competitive advantage. Those who dig and discover these analytics will no doubt create competitive advantage for their organizations, but what they are creating is a methodology that is not necessarily proprietary. Once the methodology has been documented and described, others will be able to apply it in their own organizations, much the same as other Major League Baseball teams have attempted to follow the path laid out by Billy Beane. This adoption by others offsets any potential competitive advantage.

If you buy into the approach of Beane and the analysis of Wolfe, Wright, and Smart, what is required to set this up in your organization to achieve, at least, a short-term competitive advantage?

The recipe for success falls upon several factors. First, the organization must have a strategically oriented, analytical chief people officer who is comfortable in the role of change agent. This officer must define a vision that can be embraced not only by his or her function, but also by the entire organization. Second, a sophisticated HRIS must be in existence to provide the raw analytic material.

Data fields must go beyond name, address, salary, number of dependents, and beneficiary designation. Third, the HR executive will need a team of sophisticated "miners" to tear apart the data, in order to uncover those nuggets that will form the OPS for their corporation. This team will likely be the nontraditionalists within the organization, much as the Ivy League analysts have emerged as the "seers" of Major League Baseball talent. This group will need resilience, as the traditionalists no doubt will attack their conclusions.

Once these elements are in place, it still will be up to the senior functional leader to

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find those truly predictive factors, so that the result is not just another "HR scorecard." Senior staff will require convincing, and they will want to see the link between these data and financial and customer data in order to ensure that these predictors actually lead to business performance.

Even with all of this in place, judgment still will be required. It is unlikely that we will see a day when HR professionals are transformed into backroom statisticians,

deciding on the best combination of human traits and behaviors through an algorithm developed by a staff of Ivy League wonders. The predictability of human performance and the effectiveness of organizations will always have some unknown factors. However, we can do better, and it is up to all of us in the HR profession to move our discipline from the abacus to the laptop if we are to adjust to the changing workplace around us.

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**DAVE PACE** joined Starbucks Coffee Company in July 2002 as executive vice president of Partner Resources responsible for the company's overall partner (employee) and organizational strategies. From 1981 to 1999, Pace held a wide variety of positions with PepsiCo Inc. and subsequently with the spun-off Tricon Global Restaurants (now YUM! Brands Inc.). From 1995 to 1999, Pace served as senior vice president of human resources for Tricon Restaurants International, which employed more than 300,000 people in 92 countries. In addition, Pace held overseas executive assignments in Cyprus for the Middle East/Africa region of Pepsi-Cola International and in London for its European operations.

Between 1999 and 2000, Pace served as the chief human resources officer for HomeGrocer.com, a Seattle-based Internet start-up specializing in the online sale and delivery of groceries to the home. Prior to joining Starbucks, Pace held the position of executive vice president for i2 Technologies, the Dallas-based software firm providing industry-leading solutions in supply-chain and supplier relationship management.

Pace currently serves in board positions with the Starbucks Foundation, the Human Resource Policy Association, the Cornell University Center for Advanced Human Resources Studies (CAHRS), the University of Southern California's Center for Effective Organizations (CEO), and AmericaSCORES, a national nonprofit organization that serves at-risk children through after-school programs that combine soccer and poetry to improve the health and literacy of America's youth. In 2005, Pace was inducted as a fellow in the National Academy of Human Resources. He has previously served in board positions with both the Taco Bell and i2 Foundations and was chairman of the Board of Governors of the United Hockey League, a minor league professional organization from 1998 through 2002.

Pace received his bachelor of science degree in industrial and labor relations from Cornell University.

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# COMMENTARY ON “RADICAL HRM INNOVATION AND COMPETITIVE ADVANTAGE: THE *MONEYBALL* STORY”

## THE LEADER’S ROLE: DEFINING THE CONNECTION BETWEEN CHANGING AND WINNING

IAN V. ZISKIN

**T**he business of baseball as described in the *Moneyball* story has more in common with HR and effective organizations than we might think. Five lessons from experience common both to baseball and business are the following: First of all, past performance—track record—tends to predict future success. Second, the difference between success and failure is often at the margin, the 10% of positive or negative performance that comes from alignment, effort, and execution. Third, everything is about reconciling competing priorities between quality of performance and the costs associated with delivering that performance. Next, nothing happens without talented people. Finally, we never truly know how things will turn out; that’s why we play the game.

In addition to the above commonalities between baseball—indeed all professional sports—and business, there are universal truths that bind these worlds together—people hate change and love to win. It is, therefore, the leader’s role to define a crystal-clear connection between changing and winning.

As we think about the role of leaders, consider an emerging trend in Major League Baseball. Among others, teams including the New York Yankees, Boston Red Sox, Cleveland Indi-

ans, Texas Rangers, Tampa Bay Devil Rays, Arizona Diamondbacks, and Oakland Athletics have hired general managers with a common attribute—relative youth and inexperience. At the time of their appointments, most of these individuals were 28–35 years old, while several were in their late 30s or early 40s.

Clearly, these baseball executives were not selected merely because they are relatively young and inexperienced by traditional baseball standards. So, what is going on? Quite simply, these new leaders have brought an eye for talent supported by financial acumen and quantitative analysis, a healthy disrespect for certain traditions, and a willingness to aggressively advocate for the correlation between changing and winning. This trend is about recognizing the critical importance of change agents—leaders who have the ability to love the game of baseball from within while objectively standing outside of strongly held conventions and executing on a mandate to change the way the game is played. Not a bad set of capabilities for any successful leader of change, especially HR leaders.

With this parallel between baseball executives and HR leaders as a foundation, there are eight implications for how the *Moneyball* story might help HR professionals and all business leaders rethink talent management.

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## Strategy versus Structure

Every baseball team has nine players in the field and nine batters in the lineup. Their structures are basically the same. However, their strategies of how to play the game vary considerably, as do their levels of talent. Strategy and talent to execute are much more important than structure. In fact, strategy and talent are flip sides of the same coin.

## Track Record versus Potential

Long-term potential is a legitimate reason to take a risk on a talented individual. But rely more heavily on a past track record of performance as the best predictor of future success when placing people in tough assignments. High-potential people are labeled as such based on how we have seen them perform in the past.

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*Moneyball teaches us there is a place for data and analysis in managing talent, and in creating a compelling nexus between changing and winning.*

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## Strengths versus Flat Spots

Focus the majority of developmental actions on building and capitalizing on people's strengths, the 80% of capabilities that breed their success. Create self-awareness of and work on developmental needs, but do not overinvest

in fixing things that represent 20% or less of a person's path to success.

## DNA versus Coachability

We cannot coach DNA, especially under stressful conditions when people retreat to their comfort zones. Selecting the right people for the right situation at the right moment is much more effective than coaching them to hit a curveball as it approaches home plate. Select for DNA, coach for technique.

## Will versus Skill

Talent is a state of mind, the drive to succeed, in addition to a set of skills and capabilities. Over the long run, average talent with extraordinary drive will outperform better talent with little drive.

## Diversity versus Unity

Diversity is fundamentally about surrounding ourselves with teams of the very best people who complement one another, making everyone feel included and creating a unity of purpose. Team unity should not be confused with everyone doing the same thing, in the same way, at the same time. Diversity is about orchestrating and valuing differences, not creating sameness. Managed well, diversity and unity are one and the same.

## Yes versus No

The single most important talent management decision a leader can make is the answer to the question "Should I pick this person to be on my team?" The difference between a good decision and a bad decision is enormous, because good people and bad people have a significant multiplier effect on everyone around them—but in completely opposite directions. Sometimes not choosing someone to be on our team is the best selection decision we can make.

## Judgment versus Data

*Moneyball* teaches us there is a place for data and analysis in managing talent, and in creating a compelling nexus between changing and winning. While data may inform decisions about talent, however, data never should substitute for good judgment. After all, great leadership is about making good judgments despite bad data. Likewise, good data will rarely overcome bad judgment.

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Ziskin has 24 years of human resources and leadership experience, including more than 18 years with TRW, one of Northrop Grumman's heritage companies. Most recently, he has served as corporate vice president, human resources and leadership strategy for Northrop Grumman, executive vice president and chief human resources officer for Qwest Communications, and president and founder of Executive Excellence Group, a firm that builds executive and organizational credibility.

During his career, Ziskin has had responsibility for all aspects of human resources at the corporate, sector, operating unit, and staff levels. His experience includes the aerospace and defense, automotive, electronic components, information services, and telecommunications industries in both service and manufacturing environments in over 25 countries in North America, South America, Europe, and Asia/Pacific. He has led large-scale organizational changes, including four multibillion-dollar acquisition integrations in three separate companies.

Ziskin has been a speaker and author in areas including acquisition integration, globalization, HR strategies and competencies, and leadership/talent development. He holds a bachelor's degree in management from Binghamton University, where he graduated magna cum laude, and a master's degree in industrial and labor relations from Cornell University. He is also a graduate of executive human resources programs at the University of Michigan and Cornell University, as well as general management experiences including the Thunderbird Global Leadership Program, TRW's Advanced Management and Business Leadership Programs, and LEAD1NG One Northrop Grumman, where he also serves as a faculty member and program leader. Ziskin is a board member or participant in multiple professional organizations, including the HR Policy Association, the Center for Effective Organizations at the University of Southern California, the Center for Advanced Human Resource Studies at Cornell University, and HR50.

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