

## Talent management: A critical review

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### Abstract

If the volume of literature in the popular and practitioner press is any guide, practitioners in the field of human resources are now primarily in the business of talent management. But what is talent management and what basis does it have in scientific principles of human resources and management? In this paper we address this question by reviewing problems with the definition of talent management and the lack of data supporting many practitioner claims. We then outline research that supports a systems-oriented definition of talent management that focuses on the strategic management of talent. We then outline future avenues of research to further develop the field of talent management and tie it more closely to the large volume of work in strategic human resources management.

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A casual review of the trade and popular literature on the topic of “talent management” (TM) would certainly lead one to conclude it is a popular and growing field. A search on the phrase “talent management hr” in late 2004 using a popular internet search engine yielded over 2,700,000 hits. One year later a search on the same term yielded over 8 million hits. Given the number of consulting firms engaging in talent management and the growing number of articles and books on the topic, one might also believe “talent management” to be a well-defined area of practice supported by extensive research and a core set of principles.

We find that such is not the case. A review of the literature focused on talent management reveals a disturbing lack of clarity regarding the definition, scope and overall goals of talent management. In this paper we review the practitioner-oriented publications that host most of the discussions regarding TM and identify several problems with the way TM is defined, operationalized, and supported. We then draw from the peer-reviewed strategic human resource management (HRM) literature to determine implications for TM. Next, we identify several lines of research and theory that may serve as the basis of a rigorous, scientifically based approach to TM. Finally, we offer three suggested lines of research that complement the literature in strategic HRM and tie it more closely to a strategically based TM framework.

### 1. What is talent management?

It is difficult to identify the precise meaning of “talent management” because of the confusion regarding definitions and terms and the many assumptions made by authors who write about TM. The terms “talent management”, “talent

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strategy”, “succession management”, and “human resource planning” are often used interchangeably. Consider, for instance, the following statements regarding processes for managing people in organizations:

...ensure the right person is in the right job at the right time (Jackson & Schuler, 1990, p. 235);

...a deliberate and systematic effort by an organization to ensure leadership continuity in key positions and encourage individual advancement (Rothwell, 1994, p. 6); and,

...managing the supply, demand, and flow of talent through the human capital engine (Pascal, 2004, p. ix),

which are used respectively to define human resources planning, succession planning, and talent management. While each of these terms focuses on managing employees their apparent similarity obscures the problem that the first definition refers to an outcome, the second to a process, and the third to a specific decision. Thus, the terms in the TM debate – which centers on the effective management of employee talent – are not clear and confuse outcomes with processes with decision alternatives.

Beyond the confusion in definitions, we believe this is a problem for, not so long ago, planning and managing the acquisition, selection, and careers of employees was the province of Human Resources. Why the change in terminology and what, specifically, is talent management? Several recent articles in the practitioner-oriented literature describe “talent management” as “a mindset” (Creelman, 2004, p. 3); a key component to effective succession planning (Cheloha & Swain, 2005); and, an attempt to ensure that “everyone at all levels works to the top of their potential” (Redford, 2005, p. 20). Several authors fail to define the term (Frank & Taylor, 2004; Vicere, 2005; “Six ways you can help your CEO”, 2005) or admit, “there isn’t a single consistent or concise definition” (Ashton & Morton, 2005, p. 30). Nevertheless, Ashton and Morton note, “good TM is of strategic importance” (p. 28).

Despite this inauspicious start we delved further and uncovered three distinct strains of thought regarding TM. The first defines talent management as a collection of typical human resource department practices, functions, activities or specialist areas such as recruiting, selection, development, and career and succession management (Byham, 2001; Chowanec & Newstrom, 1991; Heinen & O’Neill, 2004; Hilton, 2000; Mercer, 2005; Olsen, 2000).

Managing talent, for these authors, requires doing what HR has always done but doing it faster (via the internet or outsourcing) or across the enterprise (rather than within a department or function). Olsen offers a characteristic view, “A company’s traditional department-oriented staffing and recruiting process needs to be converted to an enterprise wide human talent attraction and retention effort”. (Olsen, 2000, p. 24). While many advocates of this perspective view TM quite broadly there is a tendency for practitioners who focus primarily on sub-disciplines or specialist areas within HR to narrow the definition of TM. For instance, recruiters have a tendency to discuss talent management in terms of sourcing the best candidates possible (“How a talent management plan”, 2004; Sullivan, 2005), training and development advocates encourage “growing talent” through the use of training/leader development programs (Cohn, Khurana, & Reeves, 2005, p. 64), compensation experts tend to emphasize the use of compensation and performance management processes (Garger, 1999), while leadership-focused writers stress succession planning and leader development (Conger & Fulmer, 2003). Regardless of the breadth of their point of view, or lack thereof, these authors replace the traditional term “Human Resources” with “Talent Management”.

A second perspective on talent management focuses primarily on the concept of talent pools. TM, to these authors, is a set of processes designed to ensure an adequate flow of employees into jobs throughout the organization (Kesler, 2002; Pascal, 2004; “The changing face of talent management”, 2003). These approaches are often quite close to what is typically known as succession planning/management or human resource planning (Jackson & Schuler, 1990; Rothwell, 1994) but can also include typical HR practices and processes such as recruiting and selection (Lermusiaux, 2005). Central to these approaches is projecting employee/staffing needs and managing the progression of employees through positions, quite often via the use of enterprise-wide software systems. In these cases the focus is generally more internal than external. Schweyer (2004a) offers a perspective typical of this approach, “The first step in talent management is to gain a solid understanding of the internal workforce” (p. 20). It may surprise many Human Resource practitioners that the problem of ensuring an adequate flow of talent into positions while optimizing organizational resources has long been a topic of interest to researchers in industrial engineering and industrial management. Commonly known as “manpower” or “workforce” planning, these approaches generally involve modeling organizational staffing/career flows by coding levels of hierarchy, rules for entering and exiting a position, and parameters such as costs, anticipated tenure, and supply and demand (Pegels, 1981; Stahlman & Lewis, 1994; Wild & Schneeweiss, 1993). The progression of people through positions due to growth, attrition, and other factors programmed into the model has been used to

simulate a variety of organizations and staffing planning problems. Enterprise talent management systems that catalogue workforce skills and the demand and supply of employees have the advantage of considering more jobs simultaneously than most manpower models, but perform essentially the same task.

A third perspective on TM focuses on talent generically; that is, without regard for organizational boundaries or specific positions. Within this perspective two general views on talent emerge. The first regards talent (which typically means high performing and high potential talent) as an unqualified good and a resource to be managed primarily according to performance levels. That is, highly competent performers are to be sought, hired, and differentially rewarded regardless of their specific role or, in some cases, the organization's specific needs. Thus, in contrast with the second perspective outlined above, organizations are encouraged to manage performance pools of talent generally rather than succession pools for specific jobs. Advocates of this approach classify employees by performance level (e.g., "A", "B", and "C" levels to denote top, competent, and bottom performers, respectively) and either encourage rigorously terminating "C" players (the "War for Talent" approach advocated by [Axelrod, Handfield-Jones, & Michaels, 2002](#); [Michaels, Handfield-Jones, & Axelrod, 2001](#)) or "topgrading" the organization via exclusively hiring "A" players ([Smart, 1999](#)). For example, topgrading is defined as "packing entire companies with A players – high performers, from senior management to minimum wage employees – those in the top 10% of talent for their pay". ("Welcome to topgrading", 2005).

The second perspective of generic talent regards it as an undifferentiated good and emerges from the both the humanistic and demographic perspectives. Talent is critical because it is the role of a strong HR function to manage everyone to high performance ([Buckingham & Vosburgh, 2001](#); [Walker & Larocco, 2002](#)) or because demographic and business trends make talent in general more valuable ([Gandossy & Kao, 2004](#); [Romans & Lardner, 2005](#); [Tucker, Kao, & Verma, 2005](#)).

## 2. Problems with TM as currently defined

It is apparent from the above that the term "talent management" has no clear meaning. It is used in too many ways and is often a means to highlight the "strategic" importance of a HR specialty (recruiting, selection, development, etc.) without adding to the theory or practice of that specialty. Or, it is employed to pitch a compelling anecdote regarding the importance of managing talent. "Talent" is essentially a euphemism for "people" and because the perspectives regarding how people can and should be managed varies so greatly the TM literature can recommend contradictory advice (see the "War for Talent" versus "topgrading" approaches above).

The three perspectives on TM that emerged from our literature review are similarly unsatisfying. Defining TM in terms of the functions of traditional HR executed more quickly (or via the internet or enterprise-wide software systems) adds nothing to our understanding of how to "manage talent". Managing recruiting, selection, and staffing via the internet may require the addition of some new skills to an HR generalist's or recruiter's skill set but does not fundamentally change the principles underlying good recruiting, selection, and staffing. Thus the first use of TM is superfluous. Perhaps it serves the purpose of re-branding HR practices to keep them seemingly new and fresh, but it does not advance our understanding of the strategic and effective management of talent.

The second perspective simply repeats much of the work done in succession and workforce planning and therefore fails to advance the theory or practice of HR. That is not to say that advances in succession management techniques or a closer integration with the organizational staffing models developed in the management sciences would not be fruitful. In fact, we feel the succession planning work driven by HR could benefit greatly from reviewing that literature. We simply suggest that calling these approaches "talent management" causes the same problems as the first perspective; it provides no incremental understanding and is therefore unnecessary.

The third perspective of TM is perhaps the most problematic. On the one hand it is an appealing message on at least two levels. We suspect the vast majority of HR practitioners would resonate to the following quote "If we deal only with programs and processes, then we never touch what is ultimately our greatest strategic differentiator: The talent inherent in each person, one individual at a time". ([Buckingham & Vosburgh, 2001](#), p. 18) In a similar vein, most high performers would probably like to be surrounded by other high performers rather than low performers and filling every job with a 90th percentile performer, at first glance, appears to be a sensible way to enhance the performance of an organization.

On the other hand, the aspirational message and compelling anecdotes underlying these approaches mask several problems. First, the maxim to manage the "talent inherent in each person" is well intended but not strategic. It offers no guidance to determine how many resources should be allocated to uncovering each employee's talent and seems to

assume that all employees are equally valuable to the firm from an economic and developmental perspective. It harkens back to a view of human resources (such as the maxim to provide 40 h of training for everyone) inconsistent with current demands (Boudreau & Ramstad, 2005). If managing each person's talent so it is fully actualized means finding a tactful way of separating low performers from the organization while providing relevant opportunities to others then this approach simply reduces to the definition of "TM as HR".

Advocates of managing talent by placing people in performance categories are similarly non-strategic. The notion that a certain percentage of performers should be routinely sloughed from the organization (or that all positions should be filled with extraordinarily high performers) ignores the possibility that, for some jobs, competent performance may be perfectly acceptable (Boudreau & Ramstad, 2005) or that an organization may wish to maximize organizational capabilities on certain competencies while it de-emphasizes others (Prahalad & Hamel, 1990). Even if such approaches made sense for an organization, its advocates offer little sound advice for implementing them. For instance, while some advocate a "rigorous" review of talent involving a debate regarding the performance and potential of each person in the organization (Handfield-Jones, Michaels, & Axelrod, 2001) the extensive literature on issues associated with rater's goals and errors in performance appraisals (e.g. Cleveland, Murphy, & Williams, 1989; Murphy, Cleveland, Skattebo, & Kinney, 2004) is ignored.

Indeed, perhaps this indicates the core problem with this approach to TM; it is rooted in exhortation and anecdote rather than data and builds an argument based the selective self-reports of executives. A typical example is provided by Handfield-Jones et al. (2001): a CEO leading a struggling company realizes talent is the key to growth and staffs the organization with high quality personnel. "Over the next three years..the company's performance improved dramatically. Profits grew from \$285 million (U.S.) to \$445 million (U.S.), and the company's stock price almost doubled. To be sure, talent was not the only lever..." (p. 52). Indeed, the company also significantly changed its merchandising processes, acquired new businesses while selling others, and reconfigured its brand portfolio. Talent, however, "was the most important thing. Without better talent, most of the other actions would not have been successful" (p. 52).

Clearly, a testable model is being advanced (talent as a mediator of the effect of business portfolio and process restructuring on profitability and stock price appreciation) with no data to test it. Left unacknowledged by the authors is the fact that these events occurred at the beginning of the U.S. economic boom of the 1990s. And the company in question by 2005 saw its profitability slip 76% (Turner, 2005). If the talent mindset was so firmly established in this company (and the talent so good) why the downturn in results? We do suspect talent is important in this case, the question is: How much and in what way? The lack of methodological and measurement rigor characteristic of this approach makes it impossible to conclude the degree to which results can be attributed to talent, technology, specific industry dynamics, the economy in general, or any other factor.

To date, the criticisms of the "War for Talent" approach to TM have been equally unburdened by rigorous data analysis. Eichenwald (2005) details the misapplication of a talent review process and its deleterious effects at Enron while Gladwell (2002) criticizes this approach for promoting a nearly exclusive focus on individuals rather than the many organizational attributes (team structure, physical capital) that support them. These criticisms are based on interviews (in the case of Eichenwald) and selected findings from social psychology research (in the case of Gladwell) but neither of these writers was central to the Enron story. The application of "talent management" techniques is widely seen as having contributed to the fall of a CEO at another large organization ("Ford ignored its human needs", 2002) but, as was the case for articles written in support of these TM approaches, other factors are not explicitly considered or are assumed to be of lesser importance.

In summary, the topic "talent management" has been enthusiastically pursued in the trade and popular press without being linked systematically to peer-reviewed, researched-based findings. And it has been defined largely in ways that have not contributed to our understanding of managing talent in organizations. TM seems to be the new phrase designed to re-package standard solutions to HR challenges (select, staff, and develop "talent" well) or to stress the need to respond to demographic changes. Popular books written by practitioners propose broad concepts for managing talent (e.g., link your people to your strategy; upgrade your organization's talent) illustrated with carefully selected analogies and anecdotes that are otherwise unsupported. To the extent that research literature is cited in these publications, the prescriptions tend to simply repeat or repackage HR practices rooted solidly in academic literature (e.g., use validated selection instruments, set challenging goals and provide feedback, rotate employees through roles that provide challenges). In these cases, TM is nothing more than the application of sound HR practices. Often, however, authors propose contradictory practices.

Given this state of affairs in the practitioner literature, it is distressing that talent management does not appear to be a term with currency in the academic literature. A search on the term “talent management” using the PSYCINFO™ database returned no hits. Our aim, of course, is not to criticize a focus on talent or to suggest that talent is not important. Instead we simply point out that TM, as defined currently, is not well grounded in research, not distinct from traditional HR practices or disciplines, and is supported mainly by anecdote.

### 3. Grounding TM in research

Although the term “talent management” does not appear in the peer-reviewed literature there is a significant body of research that has examined the link between HR investments and practices and organizational outcomes. The benefits of these linkages have been empirically demonstrated in a line of research that is well established and highly regarded (Gerhart, 2005). This field is broadly known as strategic human resource management.

Strong human resource practices have been systematically associated with personnel measures (e.g. turnover) as well as organizational performance as measured with objective (Huselid, 1995) and subjective criteria (Delaney & Huselid, 1996; Singh, 2004). These findings have been replicated within industry (Delery & Doty, 1996), across industries (Guthrie, 2001), and at several organizational levels of analysis (MacDuffie, 1995; Youndt, Snell, Dean, & Lepak, 1996). Terpstra and Rozell (1993) found an association between a firm’s adoption of staffing practices and profit but also found the strength of the relationship varied across industries. In general, this research demonstrates the value of high quality HR practices and has outlined how that relationship can vary depending on the business or people strategies adopted by the firm and its environment or technical complexity (Lepak & Snell, 2002; Lepak, Takeuchi, & Snell, 2003). From this work has sprung models that attempt to integrate strategy, HR practices, and talent (Lepak, Marrone, & Takeuchi, 2004).

Despite the impressive nature of these results, issues remain. Many of these studies are based on cross-sectional and retrospective designs and thus do not address whether HR practices lead to organizational outcomes or organizational outcomes provide the resources to invest in HR practices (Gerhart, 2005; Wright, Gardner, Moynihan, & Allen, 2005). Many measures are one-source self-reports that make it difficult to specify magnitude of the HR practice/outcome relationship (Gerhart, Wright, & McMahan, 2002; Gerhart, Wright, McMahan, & Snell, 2000; Huselid & Becker, 2000) and there is controversy regarding the organizational level at which HR effectiveness criterion data should be collected (Gerhart et al., 2002, 2000; Huselid & Becker, 2000). Even when these issues are addressed, the temporal stability of both HR practices and firm outcomes as well as issues associated with omitted variables (e.g. management depth) make it difficult to draw causal inferences (Wright, Gardner, & Moynihan, 2003; Wright et al., 2005).

Finally, and most significantly, studies of HR practices have not explicitly investigated how the choice of practices is tied to strategy. Instead, they have simply measured the extent to which practices have varied by industry. As noted by Wright et al. (2005), variation in HR practices may reflect differences in competitive climates, geographical regions, and socio-economic variables. We believe this to be a significant flaw in establishing TM as a strategic and value-added term for if practicing TM, broadly defined, is simply responding to strategic or environmental demands with high quality HR practices that produce business results then the term TM, once again, fails to add incrementally to our current understanding of how a highly functioning HR department operates.

### 4. Making TM strategic

Consider the following question, If you were to begin the process of constructing a building how would you go about it? Would you assemble a group of the best professionals in each necessary craft (plumbing, electrical systems, carpentry, etc.) and let them define your building? Or, would you start with an analysis of the relationship between “construction practices” and some outcome you hope to achieve (building longevity or cost of operation)? Probably not. You probably would first meet with an architect to begin drawing a blueprint after considering a series of key questions such as, what do you hope to accomplish with this building? Will those goals appeal to the intended customers (tenants or shoppers)? What alternatives for orienting the building on its site best accomplish its purpose?

We believe the “TM as architecture” analogy best describes the vision of early proponents of managing talent (Jackson & Schuler, 1990; Walker, 1980) and offers a systems-level, strategic perspective that makes the TM concept one that adds value and opens new research possibilities. Although other authors have noted the need for TM to adopt a

system-level or strategic framework they have failed to outline how this should occur (Gubman, 2004; Jackson & Schuler, 1990; Sears, 2002; Walker, 1980).

Perhaps the earliest attempt to explicitly tie business strategy to human resource management was made by Tichy, Fombrun, and Devanna (1982). They outlined types of strategies organizations may adopt and the organizational structures (functional, decentralized, etc.) and human resources management practices (selection, development, etc.) that best support them. In essence, Tichy et al. (1982) encourage HR departments to become more strategic by understanding the business strategy of the organization and restructuring both the HR organization and practices to support it. Jackson and Schuler (1990) elaborated by outlining how the HR planning activities (assessing HR demand and supply, implementing programs and evaluating outcomes) might be linked to organizational variables (e.g. the organization’s strategy, life cycle stage, competitive environment) over several time horizons.

Consistent with our earlier analogy of Talent Management as architecture we believe that explicit ties need to be made between strategy and talent. An early attempt to do so through the lens of changes wrought by technological innovation was attempted by Zuboff (1988), who proposed that changes in technology produce changes in the talent required to use that technology. For instance, she notes that implementing automated manufacturing systems changes the talent pool required not only by eliminating manual work, but also by changing the nature of the information gathered from the process and how it is managed. Data previously known only to the human operator manually working a product (temperature variations, etc.) now are explicitly collected and displayed to a process control operator who must possess very different skills (Richman, 1989). Stewart (1997) applied this idea to talent in general by comparing the value of talent with the difficulty of replacing it (see Fig. 1).

In the lower two quadrants of Fig. 1 are the talent pools that are easily replaced either because they add no unique value because training time is short or processes are automated or because they are readily available due to a strong pool of free-lance or temporary talent.

In the upper quadrants are the difficult to replace pools. Low value but difficult to replace talent (the upper left hand quadrant of Fig. 1) are the talent pools that have highly specialized skills that add no incremental value to the customer (such as skilled staff functions). In the upper right quadrant are the hard to replace high value talent pools that are, in Stewart’s view, “a company’s human capital” (p. 91). Stewart makes the sage observation that much of this high value, difficult-to-replace talent does not sit at the highest levels of the organization. We suspect they would not show up on most high-potential talent lists either.

Zuboff (1988) outlines some of the strategic talent implications of these classifications by recommending specific actions. For instance, low-value, difficult-to-replace talent can yield higher value if the jobs are made more consultative and information-rich. Jobs in the lower right quadrant (easy-to-replace, high value added) should either be redesigned to be unique and differentiated from the competition (thus made more difficult to replace) or outsourced. Zuboff focused specifically on the talent implications of technology changes but the same analysis can be applied to demographic and business condition changes.

Compare this talent approach to the A, B, C rankings discussed earlier. Rather than simply ranking talent, Zuboff introduces market issues into the decisions to be made with respect to talent. Her “difficult-to-replace” dimension is a labor market factor whereas the “value-added” dimension is a customer-related factor. This provides a very different way of organizing thoughts regarding talent. Suppose, for instance, that an organization’s “A” players are predominantly in the bottom left quadrant of Fig. 1. What if its “high potential” pool is disproportionately in the upper left quadrant? This approach appears to be more strategic than the ones reviewed earlier because it is more sensitive to the conditions faced by the firm (an element of the models of both Tichy et al. (1982) and Jackson and Schuler (1990) largely not apparent in

Difficulty to replace	Difficult to replace	Difficult to replace
	Low value added	High value added
	Easy to replace	Easy to replace
	Low value added	High value added
	Value added	

Fig. 1. Talent classified by difficulty-to-replace and value (adapted from Zuboff, 1988).

the strategic HRM research). Other applications of this grid are possible, for instance, classifying talent based on demands that result from the position the organization occupies in its life cycle (Sloan & Lewis, 2003).

Although Zuboff's (1988) model incorporates more strategic elements than most others it still places talent management in the position of responding to strategic needs already defined by the organization or exogenous events. That is, these approaches detail how talent should be managed when strategy emerges, or the environment (labor pool, technology) changes, but fail to detail how talent, in turn, influences the development of strategy. If TM is to be as strategic as its proponents hope it must shape organizational strategy, not simply respond quickly to the implications of strategy. TM needs to develop a point of view regarding how talent decisions are made. In the words of Boudreau and Ramstad (2005), "HR must have a unique, talent-focused perspective for improving decisions, not just a process for implementing decisions" (p. 21).

Two streams of research seem to hold the promise of creating a truly strategic approach to talent management. Both draw from strategy work developed in fields outside human resources and apply those fundamental concepts to strategic decisions regarding talent. Barney (1991, 2001) advocates a resource-based view (RBV) perspective rooted in the industrial organization management and economic literature to explore the role of talent in producing firm wide or process specific results. Boudreau and Ramstad (2005) integrated principles of strategy, economics, and human resources, and drew lessons from the evolution of the fields of finance and marketing, to develop a decision science that can underpin talent management they call "talentship". We will consider each in turn.

Barney (1991, 2001) argues that sustained competitive advantage accrues to firms that develop resources that are valuable, rare, and hard to imitate. Valuable resources allow organizations to exploit opportunities, say by applying a core technological advantage to an emerging need or transforming a resource so it is seen as valuable in new environmental contexts. One firm controls rare resources rather than many; that is, resources or capabilities that are common offer little competitive advantage since all have access to them. Finally, imitability refers to the extent to which a resource can be duplicated or effectively replaced with a substitute. Resources that are hard to imitate will likely provide advantages over the long run.

What, exactly, are resources? According to Barney (1995), "[a] firm's resources and capabilities include all of the financial, physical, human, and organizational assets used by a firm to develop, manufacture, and deliver products or services to its customers" (p. 50). The value, rarity, and imitability of resources may change over time. Thus, categorizing resources according to these three dimensions in response to external threats is crucial for understanding the alternatives and likely outcomes available to a firm. An organization with a valuable resource that becomes common slips from a position of competitive advantage to one of competitive parity. Organizations with hard to imitate resources or capabilities that no longer have value (due to, say, a quantum change in technology or changes in market preferences) also lose competitive advantage. Possessing valuable and rare resources can provide a temporary advantage that is eroded over time as other organizations duplicate the resource or find cost-effective substitutes.

Talent, of course, can be categorized as valuable, rare, and hard-to-imitate but the specific prescriptions regarding talent are not always clear. For instance, when discussing valuable resources Barney commonly (1991, 1995) discusses organizational-level competencies in the manner of Prahalad and Hamel (1990). Having talented people is clearly implied but it is not clear how to separate the contribution to value of technology versus people. Rarity as well has talent implications, but the contribution of "talent" to developing rare resources is similarly unclear as the unit of analysis is the organization, not the talent pool.

Perhaps the dimension most closely linked to talent is imitability. Barney (1995) notes that companies, through their people, gain skills and abilities over time and develop a culture, social networks, and an organizational/management structure that manages those skills and abilities and is hard for competitors to duplicate. Much of the research on the resource based view focuses on the extent to which organizations have developed human resource-based practices or processes (Lepak & Snell, 2002; Lepak et al., 2003; Ray, Barney, & Muhana, 2004; Wright et al., 2003; Youndt et al., 1996) and thus it is the dominant theory underlying strategic HRM (McMahan, Virik, & Wright, 1999).

A key challenge in this line of research is to describe the processes that explain the relationship between practices and an organization's performance. Wright and Haggerty (2005) note that the practice-outcome link, as operationalized in research studies and theoretical models, is generally distal and the level of analysis is the firm. In other words, individuals (the "talent" usually referred to by practitioners of talent management) are omitted from the model. Wright and Haggerty (2005) call attention to the need develop more complete strategic HRM models that account for multiple levels of analysis, the effect of time, and causality.

In effect, research to date has not distinguished between the need to invest in methods of managing talent (via HR practices and processes) and the need to invest selectively in talent (by focusing on one talent pool over another) versus the need to select and develop talent in general. Strategic HRM research has focused on the first issue while research from the field of industrial/organizational psychology has traditionally focused on how to improve a talent pool once it is selected. Seemingly key decisions, such as, Which talent pool is critical?, To what level does it need to perform?, and Which set of practices best ensures that performance?, are left unaddressed.

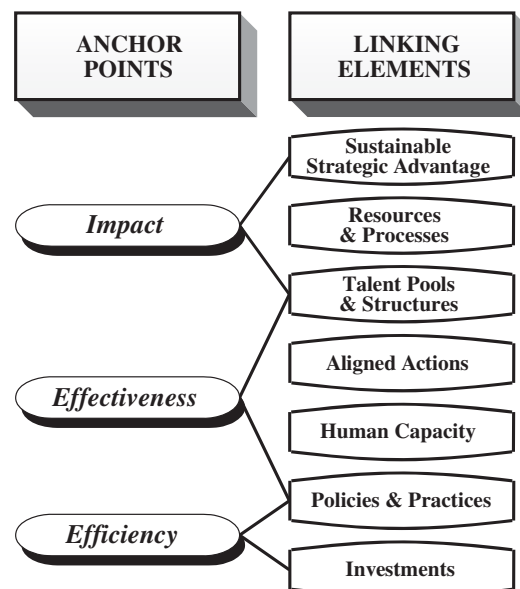
Boudreau and Ramstad (2005) bridge this gap by outlining a model that places the strategic management of talent resources on par with the theoretical frameworks that drive strategic decisions in other respected business functions, such as finance and marketing. They note that HR needs to develop “a ‘decision science’ that enhances decisions about talent resources” (Boudreau & Ramstad, 2005, p. 17) in the same way that finance has developed a decision science to facilitate business decisions separate from accounting measures. The value of doing so is that “talentship” becomes imbedded in talent decisions wherever they are made in the organization (much like financial decision tools are imbedded in HR investment decisions).

The HC Bridge<sup>®</sup> Decision Framework (see Fig. 2) outlines decisions at three independent levels of analysis (impact, effectiveness, and efficiency) and the organizational tools, practices, and resources that affect those decisions. Impact refers to the strategic impact of changing a talent pool; that is, how improving the performance or depth of a particular talent pool affects the organization’s ability to achieve important strategic goals. Central to the notion of impact is segmentation. Rather than treating all talent similarly (“40 hours of quality training for everyone”, p. 23), Boudreau and Ramstad argue that identifying pivotal talent pools – those jobs or groups of jobs for which small increments in improvement in quality or quantity yield large returns on measures of strategic interest – is critical to impact. They distinguish this pool from talent that has a “high average” value, and therefore is important to retain, but which will not generate significant strategic results if improved.

Effectiveness refers to the degree to which interventions affect the behaviors of those in the targeted talent pool. Boudreau and Ramstad note interventions can address the capacity of the talent or the processes/practices (aligned actions) of the talent. Effectiveness measures (targeting improvement of a capability or process) are common measures in HR. The decision to invest in a given intervention because it is effective (it will it drive the behaviors the

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## HC BRIDGE<sup>™</sup> FRAMEWORK




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Fig. 2. HC BRidge<sup>®</sup> Decision Framework from Boudreau and Ramstad (2005).



organization considers important) is independent of impact (the extent to which the intervention targets strategically important (pivotal) talent pools). As a result, considering effectiveness without regard for impact can lead to poor talent decisions. For instance, training programs that markedly improve the performance of a high average value talent pool, rather than a pivotal talent pool, will have little impact if the improved performance does not improve the execution of the strategy.

Efficiency is a measure of the amount of activity generated for the investment. Decisions are commonly made in HR based on “efficiency” measures, such as number of persons trained per training session, cost per hire, and ratio of HR staff to total employees. Boudreau and Ramstad note that an efficiency focus, absent a focus on effectiveness and impact, results in low cost, standardized, and centralized HR practices. Decisions made purely on the basis of efficiency can emphasize metrics without a true understanding of the implications of the metrics. What, for instance, does it mean to have one-third the HR staff of comparably sized organizations? Without effectiveness and impact measures one cannot determine whether the HR staff is accomplishing one-third the work of comparable organizations or is three times more effective.

Boudreau and Ramstad (2005) have added significantly to the talent discussion by outlining the dynamics by which talent is linked to strategy. By introducing the notion that we need a talent decision science (akin to that of finance and marketing) they go beyond acknowledging that strategic elements influence talent decisions (Jackson & Schuler, 1990; Tichy et al., 1982) or categorizing talent based on labor market or resource-based parameters (Barney, 1991; Zuboff, 1988). Their approach opens the possibility of developing rigorous nonrecursive talent-strategy models. When business leaders understand that talent investments can open strategic opportunities (are not simply a response to strategic decisions) the Human Resources function will finally have its “seat at the table” (Boudreau & Ramstad, 2005).

## 5. A note on talent management analytics

Having agreed that talent management is important, the trade and professional press now seem to have focused on “workforce analytics”. As with the term “talent management” it is difficult to precisely determine what constitutes “workforce analytics”. Once again, we have identified several definitions from practitioners:

- “...performance analytics — a new class of business intelligence that ties human capital management to financial performance” (Deloitte Consulting LLP, 2005)
- “Analytics: Gain deep visibility into staffing processes to analyze and optimize the whole system or improve individual aspects”. (Stepstone, 2005)
- “...standard metrics and dashboards for various categories of users including recruiters, business executives, hiring managers, human resources and more”. (Kenexa, 2005).

As illustrated by the above three definitions, analytics is either an analytical technique, a process for gaining talent insights, or a set of measures arrayed for a variety of users. In practice, “analytics” seems to refer to a set of metrics – collected and computed by a software application – for use by a decision maker. Schweyer (2004b), for instance, outlines some of the decisions facilitated by strong analytics:

If you do proper workforce analytics and planning, then you know who to recruit, who to develop, who to redeploy and where to redeploy them, whether you should hire someone externally or promote someone from within, and whether you should look for a contingent worker, contractor, or full-time worker. Workforce-planning analytics can help you make the best talent-management decisions and align those with your corporate objectives (2004b).

Given Schweyer’s definition it is difficult to distinguish the goals or process of analytics from those of succession management, selection and placement, and needs analysis. In fact, we suspect much HR planning is supported by an analysis of recruiting success/hit rates, turnover rates, expatriate placement success rates, and other such measures. If that is the case, why the high interest in analytics?

The drive to develop TM “analytics” seems to be a result of the growing use of enterprise-wide software systems. The promise of software and data management systems that capture human resources, finance, and operations data is that these data can be mined to gain insights with respect to talent that were previously difficult to obtain. On one level we agree. Research that previously required collecting data from various organizational databases, manipulating and keying the data, and aggregating them to the proper level of analysis certainly made the task of doing research more

difficult. However, the ease with which data tables relating human resource to financial (or other organizational) data can be created is likely to cause problems if there is no conceptual model to guide which questions should be researched, which data should be linked, or if decision-makers have no context for interpreting the results. While the practitioner literature tends to emphasize the power and ease with which data can be analyzed we see little discussion regarding the framing of the questions “analytics” are presumed to answer and how decision-makers will use those answers to effect talent changes.

Boudreau and Ramstad (2004) outline the conditions under which “analytics” can yield valid organizational conclusions. Their “LAMP” framework outlines the Logic structure, Analytics, Measures, and Process considerations necessary to influence talent decisions. First, a logical structure or conceptual model linking talent pools to an organization’s competitive advantage is necessary to generate meaningful questions regarding talent. For Boudreau and Ramstad, these questions concern the decisions that might be made with respect to the talent pool (as well as other talent issues). With this logical structure in place, strong analytics can yield insights into organizational issues. Boudreau and Ramstad view “analytics” more expansively than simply statistical analysis. In effect, they see it as a competence in general research skills. “What is analytics? It draws on statistics and research design, but it goes beyond them, to include skill in identifying and articulating key issues, gathering and using appropriate data from within and outside the HR function, setting the appropriate standards for rigor and relevance, and enhancing the analytical competencies of HR throughout the organization” (p. 7). Thus, analytics requires savvy in drawing from sources of data to address questions guided by the logic structure.

Measures includes typical HR measurements such as headcount and turnover rates. The challenge regarding measurements, according to Boudreau and Ramstad, is to balance precision with usefulness. They caution that more exacting measures (increasingly precise headcount figures, for example) may not increase the quality of talent decisions. Finally, Boudreau and Ramstad address the change management process typically overlooked in discussions of analytics. Just as a model or logical structure is necessary for interpreting measures, a change management process is necessary to implement decisions.

Balancing attention to the four elements of the LAMP framework is crucial. Overemphasizing analytics can lead to sophisticated analyses with no connection to talent decisions while overemphasizing process may start the organization down a path toward an objective that is not strategically relevant. In developing the LAMP framework, Boudreau and Ramstad note that “analytics” is not a “new class of business intelligence” or a set of measures arrayed in a dashboard. Lacking a conceptual model to guide analyses, or a process for implementing the results, the practitioner focus on “analytics” is likely to lead the field toward very elegant analyses and exacting measures that fail to address the needs of talent decision-makers.

## 6. Future directions for research

Several areas of research must be pursued for TM to add a lasting contribution to the field of human resources. First, core elements of the TM decision architecture need to be fully identified and tested. Doing so permits the development of a theory of talent that facilitates the development and testing of fully specified TM models. Second, analytical techniques that permit a system-level of analysis must be investigated and more fully incorporated into talent management work. This includes analyses at multiple levels of the organization and the specification of the impact of talent-related decisions throughout the organization. Finally, measures consistent with talent architectures and system analyses must be developed and held to professionally recognized standards of reliability and validity. Each of these research needs will be considered in turn.

### 6.1. TM decision architecture

The typical research study in the large body of strategic HRM literature begins with an examination of the HR practices and/or talent investment decisions of an organization and determines the strength of the relationship with strategically relevant (profitability, share price) or tactically relevant (turnover) outcomes. The decisions that led to that initial state – why the organization chose (or chose not) to invest in strong selection systems or leader development systems in the first place – are left unexamined. Yet, understanding these initial conditions is crucial for interpreting the HR practice-outcome linkage. At least one frequently cited study found a negative relationship between a common HR practice (the use of multi-rater feedback tools) and organizational performance (Watson Wyatt Worldwide, 2001).

Without understanding the context of the decision to implement a multirater intervention (why that particular intervention was chosen and the goal in implementing it) it becomes impossible to evaluate its impact. Perhaps the high performing organizations that did not implement multirater tools facilitate feedback via other, equally effective, means and the organizations that experienced low returns did so because of factors other than the multi-rater tool.

Boudreau and Ramstad’s (2005) call to develop a decision science that frames talent-related decisions thus warrants attention. Better specification of the decision framework also permits a more proactive use of the talent/resource classification approaches used so effectively by Zuboff (1988) and Barney (1991). For instance, Zuboff’s observation that it is possible to “informate” a low-value/difficult-to-replace job and transform it to one of “high value” does not address the question of when one should informate a job. That is, the pre-conditions to that decision are not specified. Similarly, classifying talent as “hard to imitate” does not advance the discussion of when investments should be directed to making a talent pool hard-to-imitate.

Thus, while we know from the strategic HRM literature that well-developed practices can have an effect on organizational outcomes we have no clear theory or principles to guide when or which organizational pools should be targeted. These decisions are crucial — allocating organizational resources to one talent pool or another (or to talent in general rather than technology or marketing investments) should be defended not only on the basis of some outcome measure but also on the basis of a strong link to strategy and the framing of strategic options.

To that end it is possible to propose a high-level hierarchy of the components of a strategic talent management process (see Fig. 3). This hierarchy is by no means intended to be a fully specified model. Instead, it is a conceptual framework that begins to separate the questions that have been addressed in the TM and strategic HRM literature so as to provide perspective. The components of the hierarchy are in the left column. In the right column are the questions that arise as one moves down the hierarchy and, illustrating the systems implications of the hierarchy, questions that

Talent Management Component	Relevant Questions Moving Down Levels
Strategy Sustainable Competitive Advantage	What market opportunities exist? Which organizational resources yield advantage?
Strategy Implications for Talent	Where will improvements in talent quality drive strategic gains? Where will improvements in talent fungibility drive strategic gains?
Talent Pool Strategy	How do we position various talent pools? <ul style="list-style-type: none"> <li>• What combination of performers (A vs. B vs. C) do we need?</li> <li>• What compensation policy should we adopt (above/below/at market)?</li> <li>• Which pools should be linked in career ladders?</li> <li>• Should we “informate” certain jobs?</li> <li>•</li> </ul>
Talent Management Systems	How do we implement talent pool strategies across the company? <ul style="list-style-type: none"> <li>• Competency architectures</li> <li>• Enterprise-wide data systems</li> </ul>
Talent Practices	Which practices efficiently meet our talent goals and can be captured by our systems? <ul style="list-style-type: none"> <li>• Selection</li> <li>• Recruiting</li> <li>• Performance management</li> <li>• Compensation administration</li> <li>•</li> </ul>

Fig. 3. A high level depiction of a talent management hierarchy.

result from decisions at each level that affect a previous are illustrated. Beginning with the outcomes of interest to most organizations (share/stock price, profitability, and industry peer comparisons) and strategy and sustainable competitive advantage (outlined in the work of Porter, 1996 and Barney, 1991 and 2001), organizations can use a decision science of talent management (what Boudreau and Ramstad (2005) call *talentship*) to identify the strategic implications with respect to talent. Questions at this level mainly concern how talent pools can be segmented. Boudreau and Ramstad (2005) focus on the strategic impact of talent while Zuboff (1988) focuses on high-value/difficult-to-replace talent. It may also be useful to consider “critical path” talent-skills that may be necessary at certain times in order to achieve a strategy. The main task at this level is to segment talent in a way that is consistent with the organization’s strategy and addresses the strategic implications for talent.

Once talent pools are identified and segmented it becomes possible to develop talent pool strategies. For instance, once an organization understands that one talent pool is pivotal and another is not the organization can then apply different strategic approaches to compensation, performance management, job design, and other talent management practices. For instance, the pivotal talent pool might need to be populated with 40% “A” performers while the non-pivotal pool might need only 20%. By the same token perhaps it is necessary to pay the pivotal talent pool above the market rate and the non-pivotal pool at the market rate. Note that this is not a matter of designing the practice of performance management or compensation — the same principles of goal setting, feedback, and rewards still apply and the same performance management and compensation systems can accommodate both talent pools. The question at this level isn’t “How do we implement a practice?” but “What do we want this practice to do to our talent pool?”

Next in the hierarchy are the talent management systems (the core competency architecture and HRIS or enterprise software systems) and talent practices (selection, recruiting, training and development, etc.) levels. Although strong analysis can support any level of the hierarchy, most practitioners would probably be comfortable placing analytics at the talent management systems level since that is where the data will ultimately reside. Questions regarding the competency architecture of the organization (the degree to which jobs are linked by common or graduated competencies) and the ease with which data can be aggregated will determine how effectively analytics can be used to guide talent practices. Practices, as noted previously, involve the efficient administration of HR specialty and generalist areas such as performance management and training and development.

We believe that each of these levels can benefit from future work that develops the connections among them and investigates more deeply the elements within them. We believe opportunities exist even for areas already heavily researched. For instance, it is common in strategic HRM research to assess practices by noting the number and/or quality of the practices implemented by an organization and then correlating these with outcomes such as profitability. It is uncommon to account for whether the practices measured are coordinated in any fashion. We found no study that examined whether selection practices, for instance, were linked to training and development interventions. Accounting for the extent to which practices are coordinated (e.g. applicants for a role are both selected and developed on a related set of competencies) may serve to clarify further the impact of HR practices on proximal (engaged leaders and team members) and distal (improved business performance) outcomes.

Finally, the nonrecursive impacts of decisions at each level of the hierarchy can be studied. Some of the questions that may result are included in the right column of Fig. 3. It is quite likely that implementing high-quality talent practices will change the quality of a talent pool by making the organization more attractive, more selective, or both. This, in turn, will likely change the talent pool strategy and perhaps the “pivotal-ness” of or “value-added” by certain pools. At this point it then becomes feasible to consider whether the development of a new talent segment engenders a new competitive advantage and new business opportunities.

While it is both aggressive and incomplete, the framework outlined in Fig. 3 illustrates several opportunities. Strategic HRM research has typically related talent practices to organizational outcomes without assessing the intervening steps. Practitioner advocates of TM have made the large leap from vaguely defined strategic implications to either talent management systems or talent practices. And advocates of “analytics” have typically not considered the context within which analyses are to be interpreted.

## 6.2. *The special case for talent pool strategy research*

Strategic HRM researchers consistently focus on organization-level variables but have not pursued research examining the impact of managing across multiple levels of talent within an organization. Although workforce/manpower management models from the management sciences literature frequently model the flow of “people” across

jobs and organizational levels (Stahlman and Lewis, Pegels, 1981) individual difference factors are usually ignored. That is, these models generally do not distinguish high from low performers.

Yet, it is precisely this type of research that would be helpful to HR practitioners. For example, organizations commonly pursue competitive advantage via a “promote from within” talent pool strategy, which implies linking selection and development interventions across talent pools. In the retail industry, for instance, entry-level clerks are a feeder pool for assistant manager positions, which in turn is a feeder pool for the store manager position, which is a feeder pool for a multiple-unit management job (see Fig. 4).

While the science and practice of selecting and staffing for any given position in this hierarchy is clear the implications of considering all four simultaneously are not. If we agree for this example that the competencies and traits that predict high performance as an entry-level retail clerk are different than those that predict high performance as a manager of multiple store units, then implementing a selection tool to maximize performance of the entry level pool may create a pool of talent unable to perform at higher levels and thereby hinder the organization’s ability to pursue a promote-from-within strategy. Several powerful questions emerge. How could selection test cut scores be set in order to ensure a flow of employees across these organizational levels consistent with anticipated organizational growth? When might a boundary limit be reached that requires a change in strategy (such as recruiting externally)? And, what unintended consequences might ensue from changing from a pure (hire from within) to “mixed” strategy?

In essence, research is needed to pursue development of models and analytical approaches that permit a systems analysis of talent decisions throughout the organization. Once the strategic talent direction is determined (via the decision framework), the question becomes one of system optimization. That is, determining the set of HR practices applied across linked talent pools that result in achieving the strategic goal. It may be the case that achieving system optimization requires sub-optimizing some talent pools or decisions while optimizing others.

### 6.3. Developing reliable and valid TM measures

Fulfilling the promise of a rigorous, science-based approach requires adhering to scientific standards of measurement. While that may seem obvious it is disconcerting to note the extent to which fundamental measurement principles are ignored in talent management literature. The current popularity of “workforce analytics” threatens to permit the rapid creation of metrics and “dashboards” with little concern for the validity of those measures. Noted earlier was the ambiguity of interpreting most benchmarking measures and Boudreau and Ramstad (2005) warn of the dangers of developing “...HR scorecards’ containing hundreds of indices and data elements, with no guiding framework, hoping that business leaders will invent the required decision science to use them wisely” (p. 23).

Poor measurement appears not to be a characteristic only of newly created measures. Distressingly, it also appears commonplace to avoid assessing the measurement properties of core HR practices. For instance, a large (80+) group of industrial/organizational psychologists attending a roundtable discussion on talent management at a large academic conference were asked to show, by raising hands, how many used performance management/appraisal ratings to identify high-performers as part of their organization’s talent management processes. Nearly all practitioners in the room raised their hands. When the follow-up question, “How many of you have assessed your performance

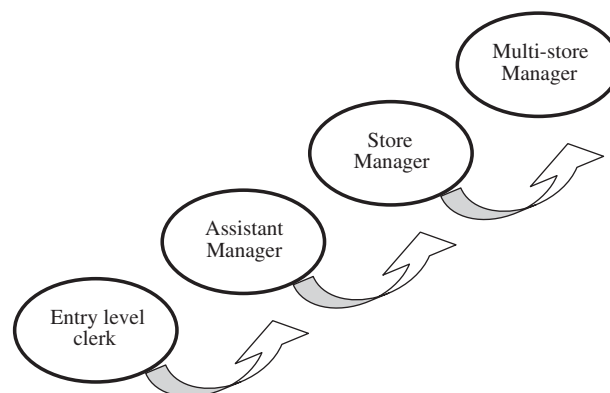


Fig. 4. Example of a common retail organization field career ladder.

management process to ensure it is valid — that it accurately identifies high performers?” nearly no hands were raised. (Lewis, Heckman, & Tuzinski, 2004).

This is an admittedly unscientific result but raises questions regarding the extent to which benchmarking, typical HR practices, or the drive to integrate HR and financial systems produce metrics that make sense. Even a well-researched process such as performance appraisal with dimensional issues (Vishwesveran, Schmidt, & Ones, 2005), unreliability (Vishwesveran, Ones, & Schmidt, 2005), and sensitivity to rater goals (Cleveland et al., 1989; Murphy et al., 2004) seems to be commonly used to identify “talent”. Rather than create new metrics it might be useful to investigate applying standard metrics in a new manner. Boudreau and Ramstad (2005) note that metrics with influence in business are those that apply to decisions wherever they are made, not just to the function where they are developed. For instance, line managers who invest in projects with low return on investment (a financial measure) do not get to blame finance for their poor decisions. Yet, HR practitioners know that a manager who experiences high turnover because of poor management or poor hiring will generally blame HR for the results.

No literature was found that examines processes for ensuring that metrics are fed back to decision-makers (hiring managers, supervisors, etc.) regarding the talent decisions they frequently make. The validity of managers’ choices to send one person over another to a development program, to hire one person over another, or to nominate an individual for a high-potential talent pool are easily calculated, meaningful metrics that have the potential to markedly improve organizational talent decisions. How these measures can be reported, and the accountability framework needed to ensure action, remains unstudied.

## 7. Summary

Researchers have an opportunity to bring clarity and thought leadership to a popular topic that lacks coherence and rigor. TM as it is used is a term without value. By grounding TM in a strategic decision framework that clearly guides talent decisions, developing systems-level models that illustrate the multi-pool impacts of talent choices, and developing reliable, validity, and theoretically meaningful measures researchers can markedly improve the quality of talent conversations in organizations.

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