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When 'Stars' Migrate, Do They Still Perform Like Stars?

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Talent! Even though many companies seem to have the pick of the lot in today’s job market, “talent” is still the rallying cry of hiring managers and CEOs everywhere. Indeed, particularly in industries based on knowledge and skill — from consulting to pharmaceuticals to professional sports to food services — organizations are still competing for the best, the brightest and the hardest working: those overachievers who regularly outshine the merely competent. The belief is that such individuals — the financial analyst with uncanny market insights, the baseball pitcher with a devastating curveball, the pastry chef with sumptuous concoctions — are a key source of competitive advantage.

Past research is clear on the benefits of high-performing workers (let’s call them “stars”). For highly complex jobs, the top 1% of employees tends to outperform average workers by 127%.¹ Star computer programmers are more productive than average ones by a ratio of eight to one.² The top 1% of inventors is five to 10 times as productive as average inventors.³ And so on. In fact, in nearly every industry studied, researchers have uncovered the disproportionate effects of talent. Clearly, why wouldn’t any organization want to corral as much as possible of that tiny fraction of people who are superstars in their fields?

But reaping the benefits of such talent is not so simple. Say you hire a star. Now you’ve got the talent you need to break into a new market and shoot to the top — but for how long? How can you guarantee that your new star will continue to *be* a star, and that he or she will stay with your organization long enough to make your investment worthwhile? Consider that employees have become increasingly mobile, as the popular notion of “free agents” suggests — workers who can pick up and take their skill sets into any environment. Although the term “free agency” originated in the sports world, it is now commonly used in reference to knowledge workers, such as management consultants, investment bankers, attorneys, financial analysts, research scientists and CEOs

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As research on the National Football League reveals, sometimes the specific nature of a job determines whether a great performer at one company can replicate that performance at another.

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and other executives. Skilled craftspeople and other nonprofessionals (for example, hair stylists, massage therapists and restaurant chefs) might also be viewed as free agents, because when they move from one venue to another they can take their expertise (and their devoted customers) with them.

But, in actuality, stars may not be as portable as they — and the companies that woo them — might think. Indeed, our research has shown that hiring a star can be very risky not only to that individual's subsequent performance but also to the morale and productivity of veteran employees (who might wonder why they are not getting the glory and high salaries that the stars command) and even to the stock value of the hiring company.⁴ So, how can you truly know if star performers can replicate their success in a new environment — in short, if they are portable?

Of course, one way to avoid the risk of high-profile hires is to develop that talent internally. But that is not always possible, and even then managers need to be concerned with retaining those in-house stars. Indeed, the issue of portability is complex and multifaceted. How can managers think strategically about why — and when — some workers are portable while others are not?

What Is Portability?

In the early 1960s, the economist Gary Becker identified two types of human capital: general skills, which have potential value to more than one employer, and company-specific skills, which are useful only to a single employer. General human capital raises portability; company-specific capital erodes it.⁵ Recently, after studying the portability of CEOs, we expanded Becker's dichotomy into five different types of human capital, listed from most portable to least: general management (the skills, knowledge and traits required to manage), strategic (specific experience in cost-cutting, driving growth and so on), industry-specific (skills and training useful in one industry but not in others), relationship (interpersonal relationships within a company) and company-specific (knowledge of an organization's routines and procedures).⁶ Although we were specifically studying CEOs, the five categories probably apply to most — if not all — managers in an organization.

To assess the portability of any particular job, managers should ask themselves various questions along the lines of the following: Does the position rely extensively on teamwork? Will a person in the position require sponsorship or buy-in from

About the Research

Research on the portability of employee performance has been particularly challenging because there are few data that directly compare workers in the same corporations, jobs and industries. Ideally, researchers need information on the performance of an individual at several companies and of several individuals working in comparable positions at the same concern. In addition, longitudinal data with detailed mobility histories of workers are necessary to investigate the portability of workers' performance. Finally, greater transparency — a labor market in which workers' performance is observable not only to their own company but to other companies as well — would allow researchers to draw more accurate conclusions about the portability of employee skills and knowledge. All these criteria are satisfied in the National Football League labor market.

The NFL labor market exhibits both high liquidity and transparency in the form of detailed statistics with which to measure

individual performance. To investigate employee portability, we compared the performance of star NFL wide receivers and punters who switched teams with that of their counterparts who did not. Wide receivers, we argued, are dependent on company-specific tacit knowledge because they are part of complex offensive schemes relying on strategy, coaches' playbooks and interactions with other players on the field. (Note: We use the words "company" and "team," and the words "employee," "worker," "athlete" and "player" interchangeably.) In contrast, we deemed that punters are not reliant on company-specific tacit knowledge in that the functions they perform are largely compartmentalized and identical to those in which their counterparts on other teams engage.

We specifically chose to study "star" players (criteria defined below) because stars are an organization's great source of strategic value, which means that understanding the extent to which they are portable is crucial. Moreover, stars generally face the fewest

restrictions on their ability to perform: When they are able to play, they are usually given the opportunity. Production is the only method by which to study reliably the capability of a given athlete to perform; we fundamentally needed to know how well a player could perform if given the opportunity. Teams execute roughly 75 to 80 offensive plays per game and allocate these limited chances, of course, to the players most likely to succeed.

In 2003, there were 32 teams in the NFL, the most elite association of American football. NFL teams acquire players by drafting them out of college and by signing undrafted players or veterans who have played for another team. Players may not break contracts with their team, although teams may terminate a player's contract at any time. Players, therefore, are usually able to change teams only upon the expiration or termination of their existing contract. Player trades across teams do occur but rarely involve star players.

colleagues or others in order to take action and be effective? Will this person be engaged in extensive knowledge sharing? Does the position rely extensively on complementary functions or departments in order to reach or serve customers? Is the position primarily engaged in external relationships with customers, suppliers, partners or others? Does much of the value of the position come from unique capabilities, team building, an understanding of workplace culture or other intangible qualities?

Another important thing to note is that different workers, even in the same jobs, can develop differing degrees of portability, either because of personal preference or organizational constraints. Employees in corporations that have suffered from managerial turnover and lack of direction, for example, will tend to form stronger external relationships and thus become more portable.

Portability: Personal or Positional?

In the past, we have looked at portability as an attribute of a *person*, *team* or *organization*, but it can also be viewed as an attribute of a *position*. With that perspective in mind, the question becomes, are some jobs inherently more portable than others?

Although some researchers have looked at differences in portability between industries, few have investigated it for jobs within a given industry. Specifically, do certain jobs require different levels of company-specific human capital, thus making some workers more portable than others?

To examine this question, we investigated a very different kind of free agent from the knowledge workers typically studied — professional football players. (See “About the Research.”) Interestingly, the labor market of the National Football League provides an almost ideal laboratory: All “companies” (that is, teams) are engaged in identical work; the job positions are the same for all teams; success can be quantified from game statistics; and employee moves are a matter of public record. The obvious choice would have been to study quarterbacks, but the best NFL quarterbacks (such as Tom Brady and Peyton Manning) rarely change teams. So we decided to focus on star wide receivers and punters, and we compared the performance of players who switched teams with that of those who did not.

The performance of wide receivers is governed by complex interactions with teammates. Receivers must have sufficient speed and agility to escape defensive players, but they must

Copious data, including precise performance metrics, abound for both wide receivers and punters. Players in these positions change teams with some frequency, and the positions themselves entail distinct, functional roles that require distinct and very different skills. We studied all punters and wide receivers meeting “star” criteria from 1993 (the year the NFL introduced full free agency) to 2002. We defined star wide receivers as players who gained 1,000 or more receiving yards in a single NFL regular season. A player was included in the sample for each season in which he passed the 1,000-yard threshold, resulting in 195 total observations of 75 different wide receivers. We defined star punters as the 10 best performers in a season, measured by gross punting yards per attempt. Players were included for each season in which they ranked among the top 10 (approximately the top third of the league), yielding 101 observations of 38 different players.

We collected performance data in three-season stretches, for a player’s star season and the two seasons thereafter. We studied performance using three measures for each position to compare athletes who moved to a different team (switchers) with those who remained with their teams (stayers). For wide receivers, we looked at the total number of receptions, receiving yards gained and receiving touchdowns. For punters, we studied the gross punting average (the average distance from the line of scrimmage that the punted ball travels before it is returned or downed), net punting average (the average distance between where the ball was returned by the receiving team and the line of scrimmage) and number of blocked punts. Our methodology also controlled for performance-relevant variables such as age, draft position and number of games played.

During the study period, the turnover of star wide receivers was 8.3% and the turnover of star punters was 19.4%. Star

wide receivers who switched teams suffered a decline in performance compared with that of wide receivers who stayed put, thus providing evidence of the importance of company-specific human capital. After a year, however, the switchers did not experience any larger drops in performance than did the stayers. (Football being what it is, performance inevitably declines over time as a player ages.) This implies that receivers can regain part of their original performance levels after an adjustment season with their new teams.

The story was different for punters. Punters who switched teams did not experience a greater drop in performance than those who stayed. This implies that punters are very portable and not dependent on company-specific human capital. Moreover, the performance of punters who did switch varied little between their first and second seasons after making their move. The managerial implications of these and other results are discussed in the main article.

also do other things: run specific routes based on timing and calculated distances, catch balls thrown by quarterbacks who themselves are under duress from charging defensive players, and elude defensive backs chasing them (who may also interfere with a receiver's attempt to catch a ball, within certain limits prescribed by the rules of the game).

Punters, on the other hand, engage in the simple but difficult act of kicking a football. How far a punter kicks a ball is almost entirely dependent on the player's individual strength and skill. Throughout the league, punters may wear the same uniform as their teammates, but they are very much individual performers. The culture of football teams reflects that difference in the degree of company-specific human capital. Punters usually practice by themselves and, when even the best punters switch teams, few sports pundits take notice or care. The same cannot be said of any other position, except for that of a field-goal kicker (who has a role that is most similar to that of a punter). Are punters, then, more portable than wide receivers?

Yes, according to our study results. For one thing, punters move more than twice as often as wide receivers: The turnover rate for star punters during the 10 years of our study was 19.4% compared with only 8.3% for star wide receivers. This raises the question of whether wide receivers are, in fact, aware of the risk of changing teams, given the extent to which their performance is based on teamwork.

In general, the performance of pro athletes is affected by their age: All the wide receivers in our study declined in performance over their years of playing. However, those who moved saw their performance drop much more steeply. For wide receivers who switched teams, the average number of receptions, receiving yards and receiving touchdowns all declined compared with those who stayed put. Interestingly, the performance of those who moved stabilized after a year, which suggests that after a period of adjustment the team-specific human capital that had been lost with the move could be rebuilt at the new team.

Punters, on the other hand, can take it with them. We found no significant difference in performance between punters who changed teams and those who did not. The performance of those who moved remained stable and did not improve over time at the new team. This suggests that punters have little need for any team-specific human capital. Indeed, increased knowledge of their new team's players and culture did not seem to benefit their performance.

Similar observations have been reported in studies of Major League Baseball. Specifically, players with the most company-specific human capital (catchers and shortstops) are the least likely to be traded; the independent outfielders are traded most often; and the remaining infield players rank somewhere in between.⁷ Such findings — in addition to our own results —

suggest that managers should focus their attention not on the question of *whether* performance is portable, but on *how much* performance is portable and for *which jobs* it is portable.

Advice to Managers

Our research suggests that simply adding good talent to the mix does not always yield the results that managers might hope for — at least not in the short term. In 1999, for instance, the Washington Redskins signed some of the most recognized offensive and defensive stars in the NFL. But in spite of this addition of future Hall of Fame talent, the Redskins' performance in the following season was far from stellar: They ended up losing as many games as they won. That record led one local sports columnist to write, "You bought all the ingredients, you put them in a big bag, you shook it up, and you figured you'd get an instant championship. It must amuse you when people still foolishly write that you have loads of talent. You know you just have loads of names."⁸

Indeed, organizations should not think of talent management as a simple "build versus buy" dichotomy. Rather, there are some positions for which they can buy, and others for which they must build. Many of the skills that might at first glance appear to be portable — whether for NFL players or portfolio managers or sales account reps — can, in fact, be very difficult to transfer. Much depends on the specific capacities in which workers serve their organizations. To what degree, for instance, is a person's job reliant on tacit knowledge that is specific to an individual company? And how interdependent is that job with respect to the work of others?

Sometimes, two jobs that appear to be the same on the surface can in fact have very different degrees of portability. Within the information technology field, for example, many software engineers perform "low level" programming, which makes the software and the hardware work together efficiently. (The term "low level" does not refer to the ease of the work itself but rather to the level at which the software will interact with the hardware.) Such programmers are the most portable because they are not so dependent on knowing what the software as a whole is meant to do. But other software engineers work at a higher level of code, where a user (a project manager, for instance) performs a task (budgeting) by deploying an application (a spreadsheet). Such "high level" programmers are relatively nonportable. As one programmer puts it, "The problems high-level programmers work on, and the groups of people they probably have to work with, tend to be large and surprisingly amorphous, and tied to many people and ideas." High-level programmers need to have a sense of their organization's politics, capabilities, internal structure and business needs, above and beyond their technical skills. Thus, much of their human capital is company-specific and is thus not portable.

Another huge factor is the way in which employees work with one another. Within investment banks, for example, the retail brokers (who handle individual clients) work primarily on their own. In contrast, institutional salespeople (who sell to major institutional investors such as Putnam, Vanguard and Fidelity) are more likely to perform their jobs in teams, and they must also work more closely with research analysts, traders and investment bankers. Thus, retail brokers can easily be hired from the outside — their largely external networks of clients and constituents might even be a huge benefit, injecting fresh blood into an organization. Institutional salespeople, on the other hand, should be developed from within, and efforts should be made to retain them.

The same type of work can also have very different degrees of portability depending on the type of organization. In human resources, for example, recruiters who work for a headhunting agency will typically form relationships with their client companies and with potential candidates in the job market. This external human capital is highly portable and can be transferred from one agency to another. In contrast, the human capital of in-house HR recruiting directors is far less portable because it resides in their deep knowledge of the culture, people, policies and processes of their organizations.

Moreover, managers should think carefully not only about portability but also about the granularity of that portability — does the employee's performance depend more on the company or on his team? Consider the work of surgeons, who are extremely dependent on nonportable human capital because a successful operation requires profound levels of communication and cooperation among the surgeons, nurses and anesthesiologists. Interestingly, past research has shown that surgeons may not even be aware of the extent to which their performance is nonportable.⁹ (In contrast, radiologists might consult with other doctors but are largely self-sufficient and thus portable. As one radiologist commented, "Radiologists are so anti-social. We're the only doctors who enter a room only after the patient exits.")

Managers should consider minimizing the portability of certain star positions in order to retain those individuals as a source of competitive advantage.

But the nonportability of surgeons might be more team-specific than company-specific. One Boston-based liver-transplant team, which moved intact from Beth Israel Deaconess Medical Center to the Lahey Clinic, performed a joint liver/kidney transplant — the first in medical history — just a few months after relocating. The operations involved three operating rooms and more than 20 medical professionals. Yet although moving an entire team offers the advantage of enabling workers to take some company-specific human capital with them, it also can be risky. There are legal matters surrounding teams moving. Also, if the team remains isolated, its members (including any star employees) will fail to create company-specific human capital in their new organization.¹⁰

Some jobs are clearly defined — punters and wide receivers, for instance, or even surgeons and radiologists. But that is not always the case. Many jobs are, in fact, sufficiently amorphous that managers can play a role in how much company-specific human capital is required for those positions — and thus how portable those employees are. With that in mind, managers should consider minimizing the portability of certain star positions in order to retain those individuals as a source of competitive advantage. Jobs can be made less portable by, for example, increasing the collaborative work involved (and breaking down any silos that might obstruct such cross-functional tasks); creating unique work-enhancing resources for employees, such as computer systems or knowledge bases, that are not available elsewhere; and offering training and development opportunities that build culture to create a unique or company-specific way of doing things. In addition, managers need to *communicate* this nonportability to their star employees to ensure that they realize the extent to which their individual success depends on the corporation's capabilities, systems and work environment. In many cases, it is truly a partnership between a star and a company that generates outstanding performance. Replacing a star is always difficult even for a portable position because the pool of talent is only so deep. Thus it behooves managers to do whatever they can to (1) keep their stars from leaving, and (2) establish processes for developing new stars in-house so that the organization is not reliant on having to poach talent from competitors.

Finally, as we have seen, building company-specific human capital is not easy. Managers should expect a new star to take time to get his or her bearings, and to accelerate that process they should provide support in helping the new hire to identify and gain access to sources of company-specific human capital. Such "onboarding" practices are generally important for all new employees, but they are especially crucial for those in jobs that are highly nonportable. For such positions, managers might consider, for example, investing heavily in mentoring, integration and training programs, and working actively to "sell" new

candidates to future coworkers. One approach is to have those coworkers participate in the interviewing and decision process to increase their buy-in for the individual who is selected.

Managers as Portable Employees

Executives also need to think of the portability of their own jobs so that they can better manage their careers. Specifically, they should be aware of the kinds of capital that drive their own performance, and they must think strategically about its portability and seek to develop whatever kind of human capital is most advantageous for their own career goals. For example, someone who works in an unstable industry, tends to change jobs frequently or plans to shift into and out of the work force might want to focus on positions that do not require much company-specific human capital. However, managers who have already built up a fair amount of company-specific human capital should think very carefully before changing jobs, recognizing that at least a short-term decline in performance will be inevitable. And when they are considering a move, they should try to assess how much company-specific human capital will be necessary in the new environment because that information will help them estimate their learning curve.

Another important factor is the amount of *team*-specific human capital that a new position requires. A large amount will increase the learning curve, which is why many executives have thought twice about joining an existing team and have instead brought their own key people with them into a new company. So, for instance, the new CEO of a corporation might assemble the core of her management team by bringing with her a COO and CFO whom she's worked with in the past. In part, that CEO is trying to increase the portability of her own human capital. But executives and managers should be careful when selecting which employees to take with them. People should be chosen based on the portability of their own human capital as well as on the roles they will fill.

Consider, for example, the manager of an investment fund who is moving to a new company. He would like to bring a key research associate with him, someone who understands his financial philosophy and approach to investing — and who is also very familiar with his preferred style of working. But he would also like to take his administrative assistant, a person who regularly performs magic in getting things done — expediting an invoice, freeing up money from a tight travel budget, cutting through red tape to make a quick hire and so on. If the fund manager could bring only one of those individuals with him, whom should he choose? All other things being equal, job portability would suggest that the fund manager select the research associate over the administrative assistant. That's because a lot of the associate's human capital is team-centric (which can be transferred), whereas much of the assistant's value is company-

centric (which is nonportable). For that reason, when high-powered academics are lured from one university to another, they often take their graduate students and researchers with them but leave their secretaries behind. The value of the former lies in their deep understanding of the professor's entire body of work (that is, portable human capital); the value of the latter lies in the knowledge of a particular university's systems and processes (that is, nonportable human capital).

MANY OF THE SKILLS that are considered portable — whether for NFL players or research scientists or management consultants — may, in fact, vary widely depending on the specific capacities in which those workers serve their organizations. Understanding these capacities is essential for any company attempting to analyze the key ingredients of sustainable competitive advantages that derive from human capital. Our research, which has probed the application of human capital theory to talent portability, should help companies recognize that an entire class of factors — specific roles within an organization — greatly determines the portability of performance. With that knowledge, executives can gain a deeper understanding of the pros and cons of hiring certain star employees — and they can also better manage their own careers.

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